

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Trane US, Inc. 1515 Mercer Road Lexington, KY 40511

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Trane Performance Climate Changer Air Handler - Size 120 Un-stacked Unit

APPROVAL DOCUMENT: Drawing No. AIRS0704, titled "Trane Performance Climate Changer Air Handler – Size 120 Un-stacked Unit", sheets 1 through 41 of 41, prepared by Wolters Engineering, Inc., dated September 10, 2013, signed and sealed by Scott Wolters, P.E., on September 10, 2015, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 12-0629.03 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.

MIAMI-DADE COUNTY

He GAM Expirate Approx 02/18/2016

NOA No. 14-1120.12 Expiration Date: 11/21/2018 Approval Date: 02/18/2016 Page 1

Trane US, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 12-0629.03

A. DRAWINGS:

1. Drawing No. AIRS0704, titled "Trane Performance Climate Changer Air Handler – Size 120 Un-stacked Unit", sheets 1 through 41 of 41, prepared by Wolters Engineering, Inc., dated September 10, 2013, signed and sealed by Scott Wolters, P.E., on 11/06/2013.

B. TESTS:

 Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of Trane Performance Climate Changer Air Handler Size 120 Non-Stacked Unit, prepared by Hurricane Test Laboratory, Inc., Report No. 0254-0607-11, dated 04/09/2012, signed and sealed by Vinu J. Abraham, P.E.

C. CALCULATIONS:

1. Panel and fasteners analysis prepared by Wolters Engineering, Inc., dated July 23, 2012, signed and sealed by Scott Wolters, P.E.

D. QUALITY ASSURANCE

1. By Miami-Dade County Department of Regulatory and Economic Resources.

E. MATERIAL CERTIFICATIONS

- 1. Tape properties by Butly.
- 2. Rigid Froth-Foam properties.
- 3. Industrial Polyurethane Adhesive/Sealant properties by Sikaflex.

F. STATEMENTS

1. FBC, 2010 conformance letter, dated July 23, 2012, signed and sealed by Scott Wolters, P.E.

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS:

1. Drawing No. AIRS0704, titled "Trane Performance Climate Changer Air Handler – Size 120 Un-stacked Unit", sheets 1 through 41 of 41, prepared by Wolters Engineering, Inc., dated September 10, 2013, signed and sealed by Scott Wolters, P.E., on 09/10/2015.

B. TESTS:

1. None.

C. CALCULATIONS:

1. None.

Heimy A. Makar, P.E., M.S.

Product Control Section Supervisor NOA No. 14-1120.12

Expiration Date: 11/21/2018 Approval Date: 02/18/2016

Trane US, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- D. QUALITY ASSURANCE
 - 1. By Miami-Dade County Department of Regulatory and Economic Resources.
- E. MATERIAL CERTIFICATIONS
 - 1. None.
- F. STATEMENTS
 - 1. FBC, 2014 conformance letter, dated September 17, 2015, signed and sealed by Scott Wolters, P.E.

Heliny A. Makar, P.E., M.S. Product Control Section Supervisor

> NOA No. 14-1120.12 Expiration Date: 11/21/2018

Approval Date: 02/18/2016

GENERAL NOTES, TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLER - SIZE 120 UNSTACKED UNIT.

- 1. THIS PRODUCT, FABRICATED AND ANCHORED AS DETAILED IN THIS DRAWING, IS LARGE MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE THE USE OF IMPACT PROTECTIVE DEVICES. ALLOWABLE UNIT DESIGN PRESSURE IS +/- 55 PSF. AND THE ROOF DESIGN PRESSURE IS +/- 41.25 PSF. THIS PRODUCT APPROVAL IS APPLICABLE TO UNIT SIZES 57 THROUGH 120: THE SIZE 120 IS SHOWN IN THIS APPROVAL.
- 2. THIS PRODUCT HAS BEEN TESTED TO TAS 201-94, TAS 202-94 STRUCTURAL LOADS, AND TAS 203-94 (REF. TEST REPORT HTL-0254-0607-11), AND MEETS THE HIGH VELOCITY HURRICANE ZONE REQUIREMENTS OF THE 5TH EDITION (2014) FLORIDA BUILDING CODE. THIS PRODUCT IS NOT RATED FOR WATER INFILTRATION RESISTANCE AND HAS NOT BEEN TESTED FOR WIND DRIVEN RAIN. THE TESTED PRODUCT REMAINED OPERABLE AFTER IMPACT/CYCLIC TESTS WERE COMPLETED.
- 3. THIS PRODUCT APPROVAL IS GENERIC IN NATURE AND DOES NOT PROVIDE INFORMATION FOR SPECIFIC PROJECTS WHERE THE CONDITIONS VARY FROM THIS DOCUMENT. THE FLORIDA LICENSED ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT SHALL BE RESPONSIBLE FOR THE DESIGN, SIZING, AND STRUCTURAL ADEQUACY OF THE PRODUCT FRAMEWORK AS WELL AS CURBING AND ATTACHMENT TO THE ROOF, OR AS ACCEPTED BY THE CORRESPONDING BUILDING DEPARTMENTS.
- 4. THE STRUCTURAL ADEQUACY OF THE ROOF TO SUPPORT THIS EQUIPMENT IS NOT PART OF THE SCOPE OF THIS PRODUCT APPROVAL AND SHALL BE REVIEWED BY THE CORRESPONDING BUILDING DEPARTMENTS. ANCHORAGE SHOWN HEREIN HAS BEEN ANALYZED FOR SLIDING AND OVERTURNING LOADS FOR THE CONFIGURATION INDICATED, AND SMALLER CONFIGURATIONS ASSUMING THE HEIGHT IS NO MORE THAN TWICE THE WIDTH. OTHER CONFIGURATIONS NOT INDICATED HERE SHALL BE ANALYZED BY THE DESIGN PROFESSIONAL OF RECORD TO PREVENT SLIDING AND OVERTURNING OF THE EQUIPMENT, AND SHALL BE REVIEWED BY THE CORRESPONDING BUILDING DEPARTMENTS. SEE PAGE 31.
- 5. THIS PRODUCT APPROVAL IS FOR THE STRUCTURAL AND IMPACT/CYCLIC PERFORMANCE OF THE AIR HANDLER, INCLUDES PIPE CABINET, ENCLOSURES. THESE ENCLOSURES INCLUDE THE OPTIONAL EXTERNALLY MOUNTED COMPONENTS AS SHOWN IN THE DRAWINGS, FOR EXAMPLE HOODS ATTACHED TO AIR INTAKES AND EXHAUST OPENINGS, WINDOWS/VIEWPORTS, AND DOORS, AS WELL AS THE STRUCTURAL ELEMENTS / HOUSINGS FOR MINIHELIC GAUGES, JUNCTION BOXES, UV INTENSITY METERS, DISCONNECT SWITCHES, RACEWAYS, AND GFCI INTERFACES. THIS PRODUCT APPROVAL DOES NOT INCLUDE INTERNALLY MOUNTED COMPONENTS OR ANY ELECTRICAL DEVICES OR CIRCUITRY.
- 6. THE PRODUCT IS CONSTRUCTED IN BUILD GROUPS. BUILD GROUPS MAY BE ASSEMBLED INTO SHIPPING SECTIONS; ASSEMBLY SHALL BE WITH SPLICE PLATES AS SHOWN HEREIN. BUILD GROUPS OR SHIPPING SECTIONS MAY BE FURTHER ASSEMBLED INTO INSTALLED UNIT; ASSEMBLY SHALL BE WITH THREADED ROD BETWEEN LIFTING LUGS AS SHOWN HEREIN.
- 7. PIPE CABINET (PC) SECTIONS MAY BE ADDED INTO THE ASSEMBLY. IF USED, ASSEMBLY WITH OTHER BUILD UNITS OR SHIPPING SECTIONS SHALL BE WITH THREADED ROD BETWEEN LIFTING LUGS AS SHOWN HEREIN.
- 8. THE 4/3 ALLOWABLE STRESS INCREASE HAS NOT BEEN USED IN THE ANCHOR ANALYSIS FOR THIS SYSTEM.
- 9. DISSIMILAR MATERIALS THAT COME INTO CONTACT SHALL BE COATED OR OTHERWISE PROTECTED PER FBC TO PREVENT GALVANIC REACTIONS.
- 10. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND ALL FINISHES.
- 11. ACRONYMS USED IN THIS APPROVAL ARE AS FOLLOWS: EOU IS END OF UNIT, DOAF IS DIRECTION OF AIR FLOW, SS IS SHIPPING SPLIT, PC IS PIPE CABINET.BG IS BUILD GROUP.
- 12. ALL UNITS OF MEASURE ARE IN INCHES UNLESS OTHERWISE SPECIFIED
- 13. 2" MAX. DIAMETER CIRCULAR HOLES MAY BE FIELD DRILLED THROUGH THE EXTERIOR WALLS FOR INSTALLATION OF CONDUIT OR COMPONENTS. HOLES SHALL BE PROTECTED FROM WIND BY CONNECTED EQUIPMENT OR CONDUIT, BY OTHERS, AND PROPER SEALING TO PREVENT AIR EXCHANGE SHALL BE BY OTHERS. HOLES SHALL BE 3" MAX. FROM ANY PANEL EDGE. MAX. 4 FIELD-DRILLED HOLES PER PANEL, 12" ON CENTER MINIMUM.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 4-120.1
Expiration Date 1/2.1/20

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING, INC
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FX: (561) 225-1982

SEP 10 20%

DRAWING#

1 OF 41

SHEET

AIRS0704

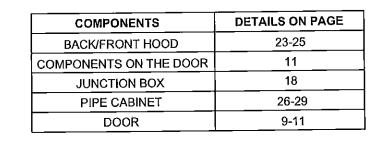
SECTION

DESC.

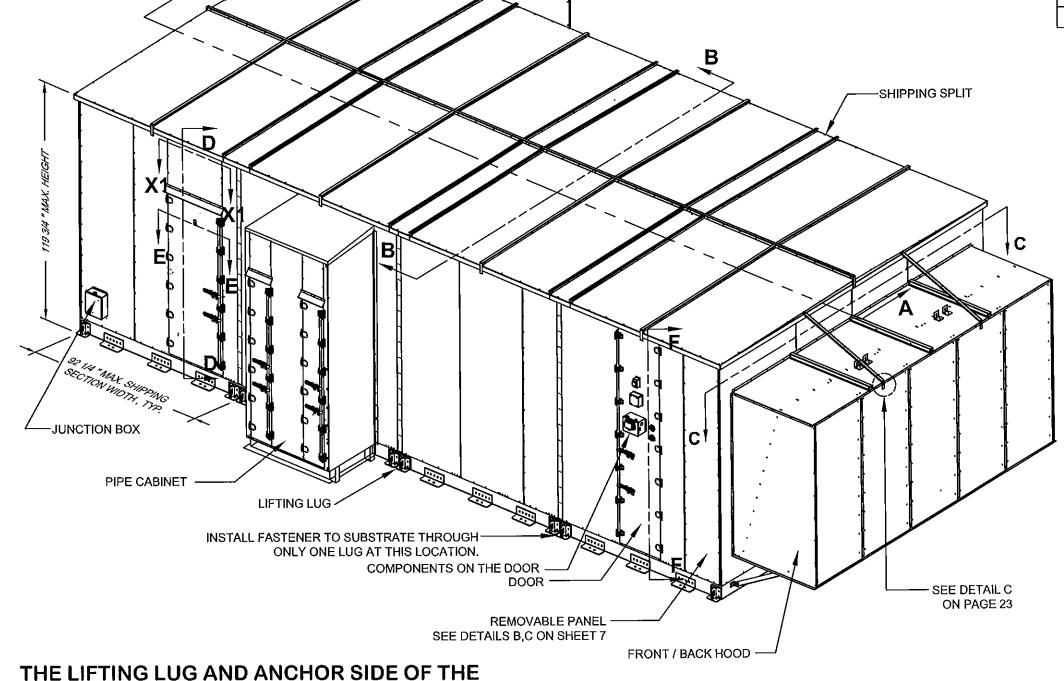
TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLER - SIZE 120 UNSTACKED UNIT

REV. HISTORY	 BY: K.YUVARAJA	REV.	Α
MOCK UPDWG SHEET REF:	 SCALE: NTS	DATE	10-SEP-2013

GENERIC FOAM PANEL CROSS SECTION DETAILS



CROSS SECTION	REFERENCE PAGE
A-A	6
B-B	5
C-C	7
D-D	8
E-E	9
X1-X1	8
F-F	9



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No14-1120.12
Expiration Date 11/21/2018

By He A- Wale Miani Dade roduct Control

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING, INC.
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412

PH/FX: (561) 225-1982 SEP L (7/161)

DRAWING # AIRS0704

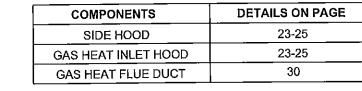
SHEET SECTION

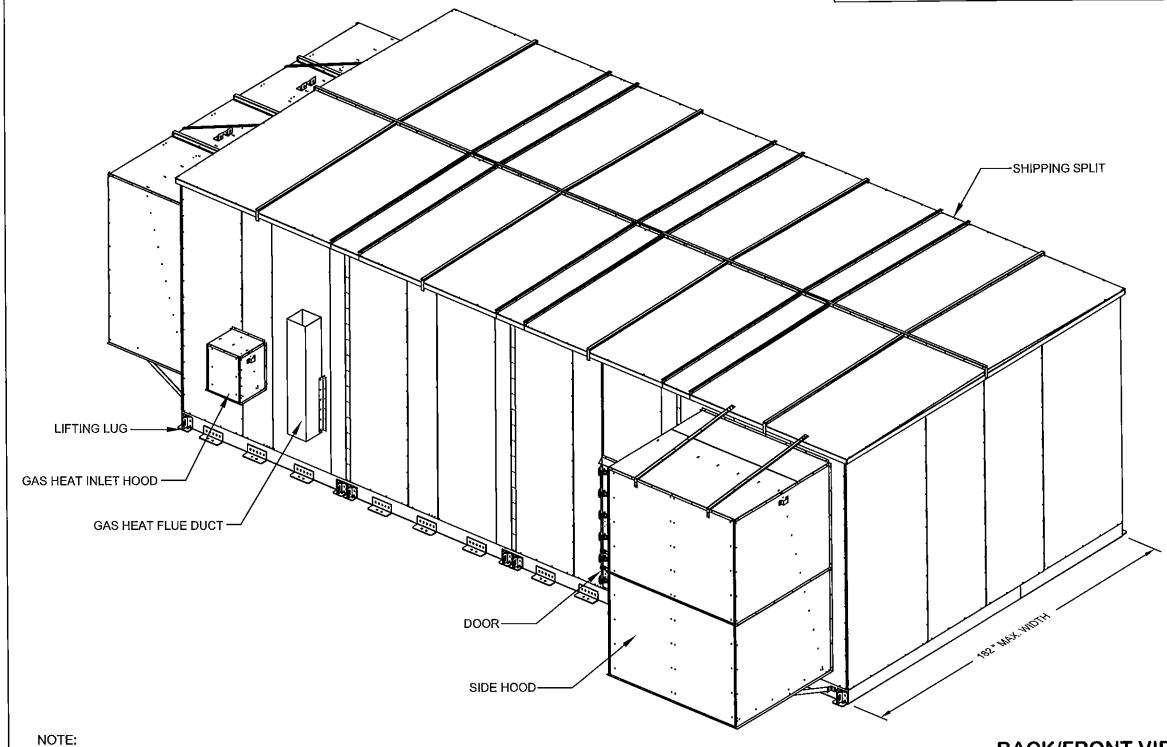
2 OF 41

UNIT IS REFERED TO AS THE UNIT SIDES.

TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLER - SIZE 120 UNSTACKED UNIT

REV. HISTORY		BY: K.YUVARAJA	REV.	Α
MOCK UPDWG SHEET REF:	2-5 OF 50	SCALE: NTS	DATE	10-SEP-2013





PRODUCT REVISED as complying with the Florida Building Code Acceptance No 4-1170. Expiration Date 11/21/20

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING, INC.
(COA# 27194)
15211 97TH ROAD N WEST PALM BEACH, FL 33412

PH/FX: (561) 225-1982 SEP 1 () 初化

1. THE LIFTING LUGS ARE ATTACHED TO THE SIDES OF THE UNIT.

BACK/FRONT VIEW

REV.

DRAWING# **AIRS0704** TRANE PERFORMANCE CLIMATE CHANGER SHEET SECTION **AIR HANDLER - SIZE 120 UNSTACKED UNIT** 3 OF 41

REV. HISTORY		BY: K.YUVARAJA	REV.	Α
MOCK UPDWG SHEET REF:	7 OF 50	SCALE:	DATE	10-SEP-2013

	BILL OF MATERIALS		159	WASHER .563" ID x 1.375" OD	GALV. STEEL
1	10-16 x .75" SELF-DRILLING SCREW	GRADE 5 STEEL	1 60	SCREW 1/2"-13 x 1.2 HEX CAP HEAD	GALV, STEEL
2	.125" THICK x 2" WIDE TAPE	BUTYL	 	LIFTING LUG (1ST LEVEL)	GALV. STEEL
3	.188 (.06" COMPRESSED) x .625" GASKET	PVC/NBR	62	0.06" THICK LUG GASKET	PVC/NBR
4	10-16 x 1.75" SELF-DRILLING SCREW	GRADE 5 STEEL	63	SPLICE PLATE	GALV. STEEL
5	DECORATIVE COVER	GALV. STEEL		0.06" THICK PLATE GASKET	PVC/NBR
6	DECORATIVE COVER	GALV. STEEL		BOLT 5/16"-18 x 6" HEX MACHINE	GALV. STEEL
7	.120" THICK x 1" WIDE TAPE	BUTYL	166	WASHER .375" ID x .875 OD	GALV. STEEL
8	.375" THICK x .750" WIDE GASKET	PORON	$\frac{160}{67}$	NUT 5/16"-18 HEX FLANGE (HW)	GALV, STEEL
9	HAT CHANNEL	GALV. STEEL	1 68	WALL BOTTOM L ANGLE	GALV. STEEL
_		GALV. STEEL			T L
	DOOR HINGE		69	ROOF KEEL STRUCT. ADHESIVE SIKAFAST 3131S	POLYMER
	DOOR CAM BRACKET	GALV. STEEL	70		GALV. STEEL
12	STRIKER PLATE	GALV. STEEL		ROOF BACKING PLATE	
13	.06" THICK x .5" WIDE TAPE	BUTYL	72	.188" (.06" COMPRESSED) x 1.25" GASKET	PVC/NBR
14	WINDOW 3/16" PLEXIGLASS 8 3/4" x 8 3/4"	PLEXIGLASS	73	DOOR FOOTER	OALY, OTELL
15	WINDOW FRAME	GALV. STEEL	74	SUPPORT MULLION ASSEMBLY	
16	STRUCT, ADHESIVE SIKAFLEX 552	POLYMER	75	BASE SUPPORT CHANNEL / PC BASE L ANGLE	GALV. STEEL
17	1/4"-14 x 3/4" SELF-DRILLING SCREW	GRADE 5 STEEL	76	DRIP LIP	GALV. STEEL
	UV DISCONNECT SWITCH	VARIES	<u> 77 </u>	PC SHIPPING BRACKET	GALV. STEEL
	INTENSITY MEASUREMENT METER	VARIES	78	3/8"-16 x 1 1/4" HEX CAP SCREW	GRADE 5 STEEL
20	GFCI JUNCTION BOX	GALV. STEEL	79	3/8"-16 HEX NUT	GRADE 5 STEEL
21	CONDUIT 1" RUNNING THREAD	GALV. STEEL	80	PC BASE RAIL	GALV, STEEL
22	1" CONDUIT NUT	GALV. STEEL	81	CHAIN GUIDE	GALV. STEEL
23	1" CONDUIT BUSHING	GALV, STEEL	82	3/8"-16 x 3" BOLT	GRADE 5 STEEL
24	CONDUIT 1/2" RUNNING THREAD	GALV. STEEL	83	<u></u>	
25	1/2" CONDUIT NUT	GALV. STEEL	84	UNIT WELD BRACKET	GALV. STEEL
26	1/2" CONDUIT BUSHING	GALV. STEEL	85		
27	MINIHELIC GAUGE	VARIES	86	PC ROOF ANGLE	GALV. STEEL
28	4-40 x 1 1/4" PHILLIPS PAN HEAD SCREW	GRADE 5 STEEL	87		<u> </u>
29	ELBOW	GALV. STEEL	88	1/2"-13 x 1.2" HEX CAP BOLT	GRADE 5
30	.06" THICK x 0,38" WIDE TAPE	BUTYL	89		
31			90		<u> </u>
32	GANGED DOOR HANDLE ASSEMBLY	GALV. STEEL	91	SHIPPING SPLIT SUPPORT ANGLE PTAF	GALV. STEEL
33	DOOR VIEWER	VARIES	92	SHIPPING SPLIT VERTICAL CHANNEL	GALV. STEEL
34			93		
35	PADLOCK BRACKET	GALV. STEEL	94		
36	1/4-20 x 1/4" SET SCREW	GRADE 5 STEEL	95		
37	10-16 x 1/2" SELF-DRILLING SCREW	GRADE 5 STEEL	96		
38	.5" x 2.5" x 2.5" SPECIALTY GASKET	PVB/NBR	97		
39	5/16"-18 x 7/8" SHEET METAL SCREW	GRADE 5 STEEL	98	<u> </u>	
40	SADDLE BRACKET	GALV. STEEL	99		
41				.38" THICK x 2" WIDE ROLL	BUTYL
42				SEAM CAP	GALV, STEEL
43				ROOF STRIP	GALV. STEEL
	FIRST LEVEL BASE RAIL	GALV. STEEL		OVERHANG	GALV. STEEL
45		L		A-FRAME HORIZONTAL	GALV. STEEL
46	FOAM COVER	GALV. STEEL		A-FRAME VERTICAL	GALV, STEEL
47	FOAM COVER CORNER BRACKET	GALV. STEEL		HOOD LIFTING LUG ANGLE	GALV. STEEL
48				HOOD LIFTING LUG HAT	GALV. STEEL
49	JUNCTION BOX	GALV. STEEL_		HOOD SUPPORT	GALV, STEEL
50	SEALANT, SIKAFLEX 221 CAULK	POLYMER		HOOD SUPPORT BRACKET	GALV. STEEL
51				HOOD L-ANGLE	GALV, STEEL
	DISCONNECT SWITCH ASSEMBLY	VARIES	[111	HOOD SUPPORT TOP CHANNEL	GALV. STEEL
53	DISCONNECT SWITCH BLOCKOFF	GALV. STEEL	112	HOOD BACKING PLATE	GALV, STEEL
54	.0325" THICK x 1.88" x 15.88" GASKET	POLYOLEFIN		WALL ANCHOR	GALV. STEEL
55	.0325" THICK x 3" x 17" GASKET	POLYOLEFIN		DOUBLE SIDED TAPE 1/16 (COMPR.) x 3/4 x 216	PVC/NBR
56	DISCONNECT HANDLE KIT (NON STRUCTURAL)	VARIES		PC ROOF KEEL	ALUMINUM 6063-T6
	THREADED ROD 1/2"-13 x 10.5"	GALV, STEEL		KEEPER/DOOR CAM	ZAMAK#3
58	NUT 1/2"-13 HEX MACHINE	GALV. STEEL	117		
		-		· · · · · · · · · · · · · · · · · · ·	

118 l		
	EOU WALL SUPPORT CHANNEL	GALV. STEEL
120	FLUE DUCT L ANGLE	GALV. STEEL
		GALV. STEEL
		GALV. STEEL
123	NEW DOOR HEADER	GALV. STEEL
124		
125		
126	BOTTOM CAP	STAINLESS STEEL
127	FLUE DUCT	STAINLESS STEEL
128	DOAF BEAM	GALV. STEEL
129	WALL PANEL BACKING PLATE (P.C)	GALV. STEEL
130	0.125 X 5/16" RIVET	GALV. STEEL
131	BACKING PLATE (UNIT ROOF FOR P.C)	GALV. STEEL
132		
133	DOOR HEADER	GALV, STEEL
134	EYEBROW	GALV. STEEL
135	UV VIEW PORT	GALV. STEEL
136	SUPPORT GUSSET BRACKET	GALV. STEEL
		GALV. STEEL
138	CORNER SEAM CAP	GALV. STEEL
		GALV. STEEL.
		STEEL.
		GALV. STEEL
142	DOAF BASE SUPPORT CHANNEL	GALV. STEEL.
143	PC LIFITING LUG	GALV. STEEL
	120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141	120 FLUE DUCT L ANGLE 121 SHIP SPLIT SPLICE PLATE 122 HOOD L-ANGLE FOR HOOD BOTTOM PANEL 123 NEW DOOR HEADER 124 125 126 BOTTOM CAP 127 FLUE DUCT 128 DOAF BEAM 129 WALL PANEL BACKING PLATE (P.C) 130 0.125 X 5/16" RIVET 131 BACKING PLATE (UNIT ROOF FOR P.C) 132 133 DOOR HEADER 134 EYEBROW 135 UV VIEW PORT 136 SUPPORT GUSSET BRACKET

NOTE: PVC/NBR IN BOM TO THE LEFT INDICATES POLYVINYL CHLORIDE / ACRYLONITRILE BUTADIENE RUBBER, SINGLE-SIDED EXCEPT ITEM 114.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 14-1120.12
Expiration Date 11/21/2018

By He L. A. Allah Miami Dade Product Control

SCOTT WOLTERS
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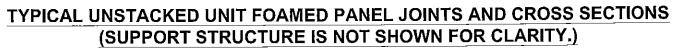
AIRS0704

SHEET 4 OF 41

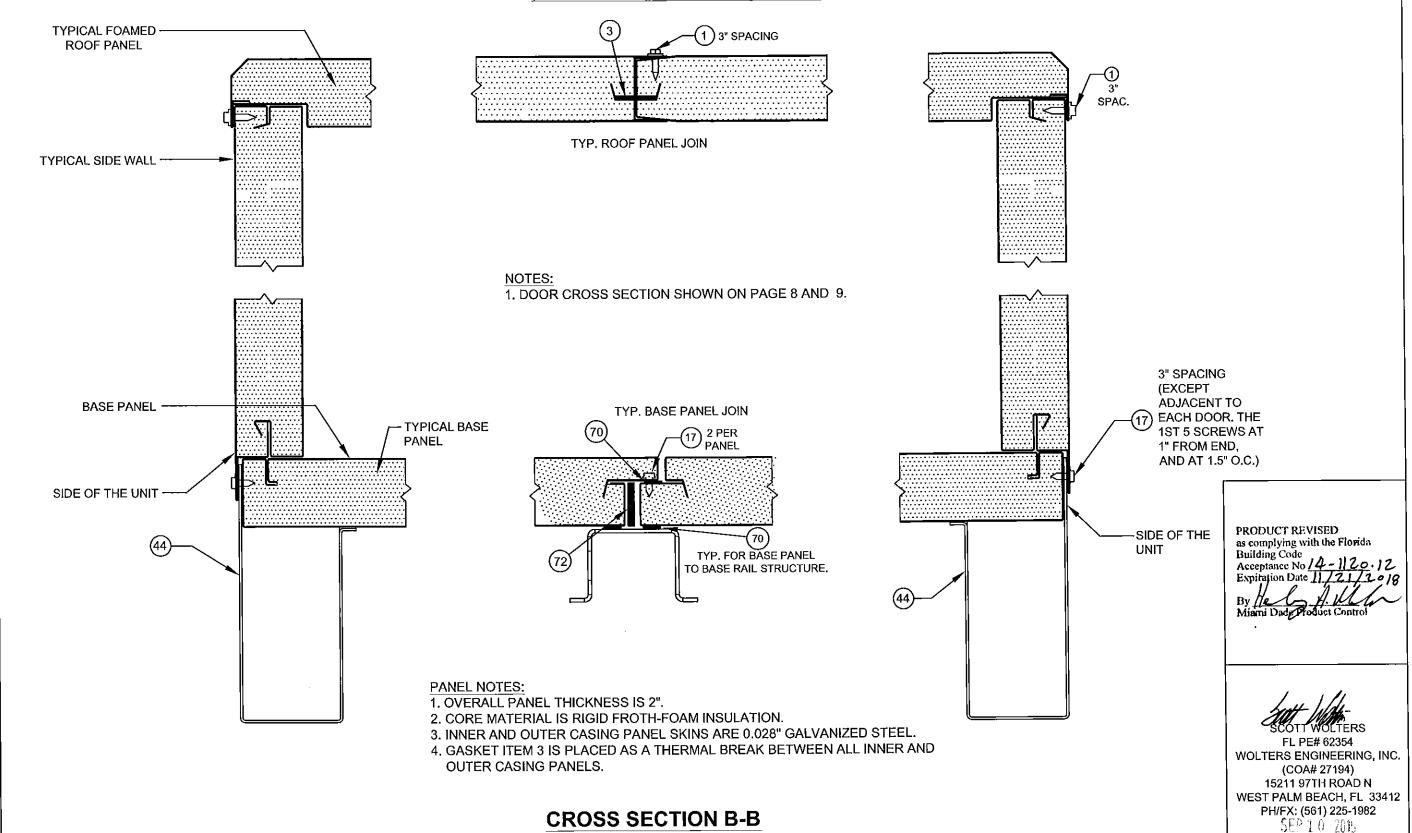
AIRS0704

TRANE PERFORMANCE CLIMATE CHANGER
AIR HANDLER - SIZE 120 UNSTACKED UNIT

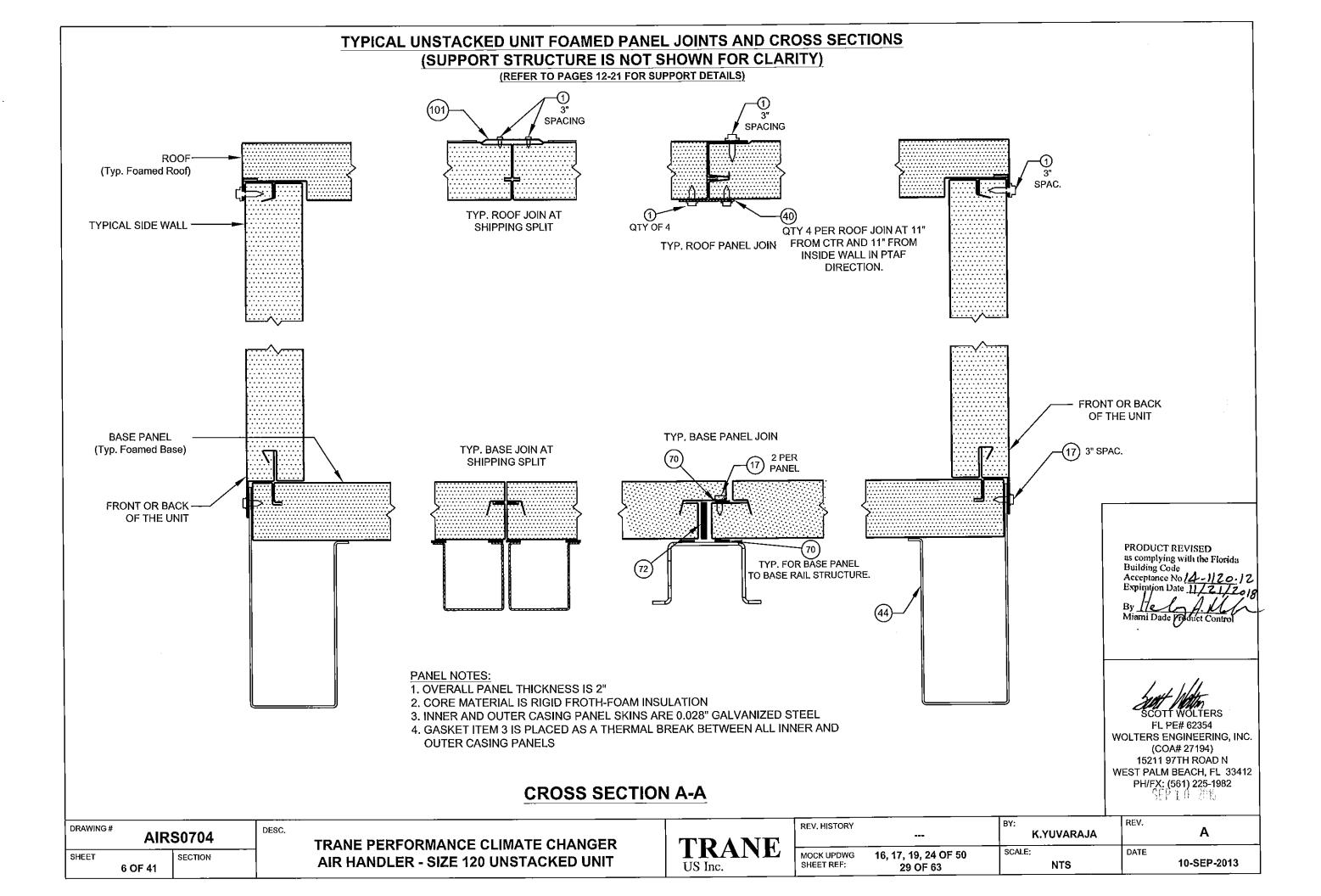
REV, HISTORY		BY: K.YUVARAJA	REV.	Α .
MOCK UPDWG SHEET REF:	5 OF 50	SCALE:	DATE	10-SEP-2013

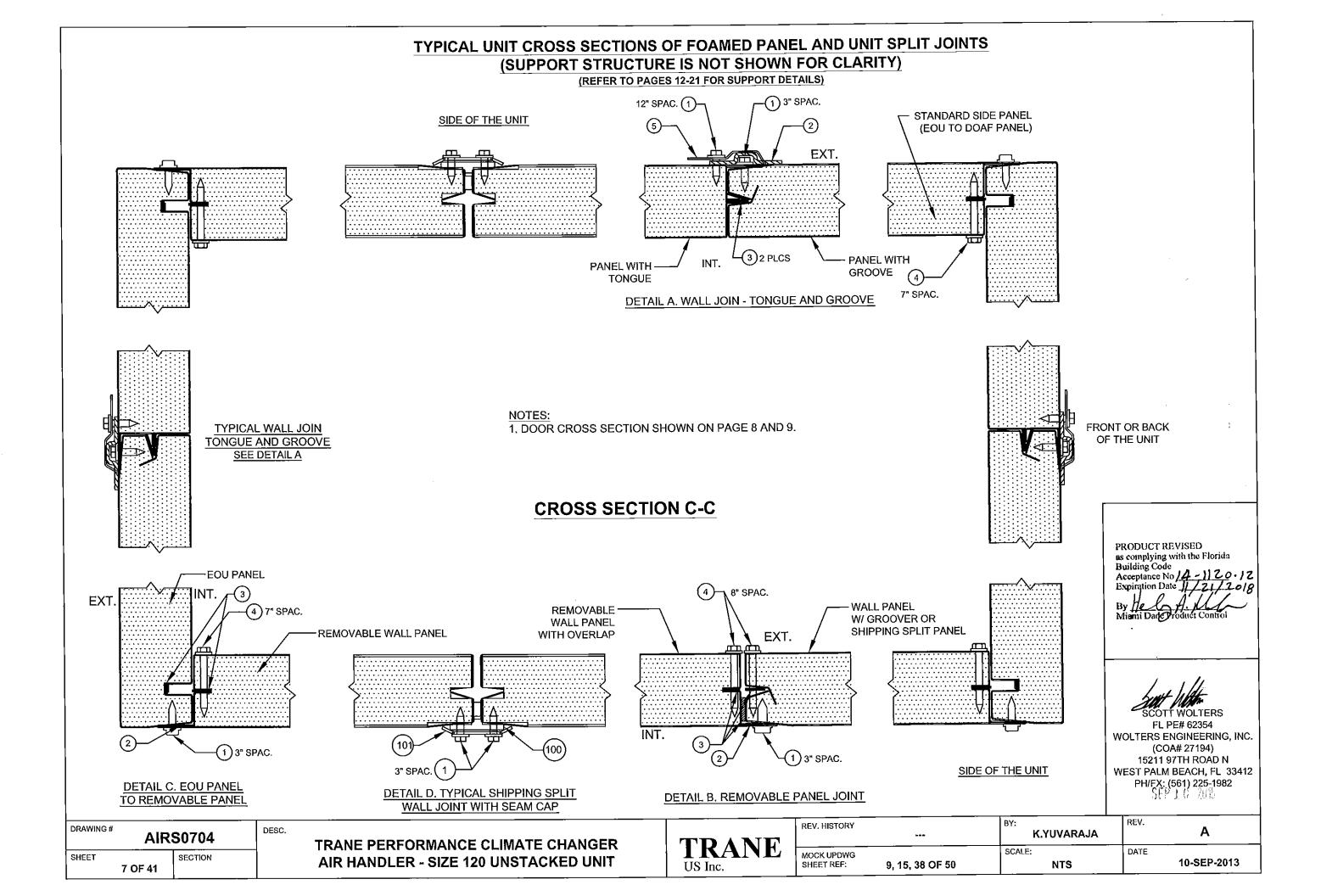


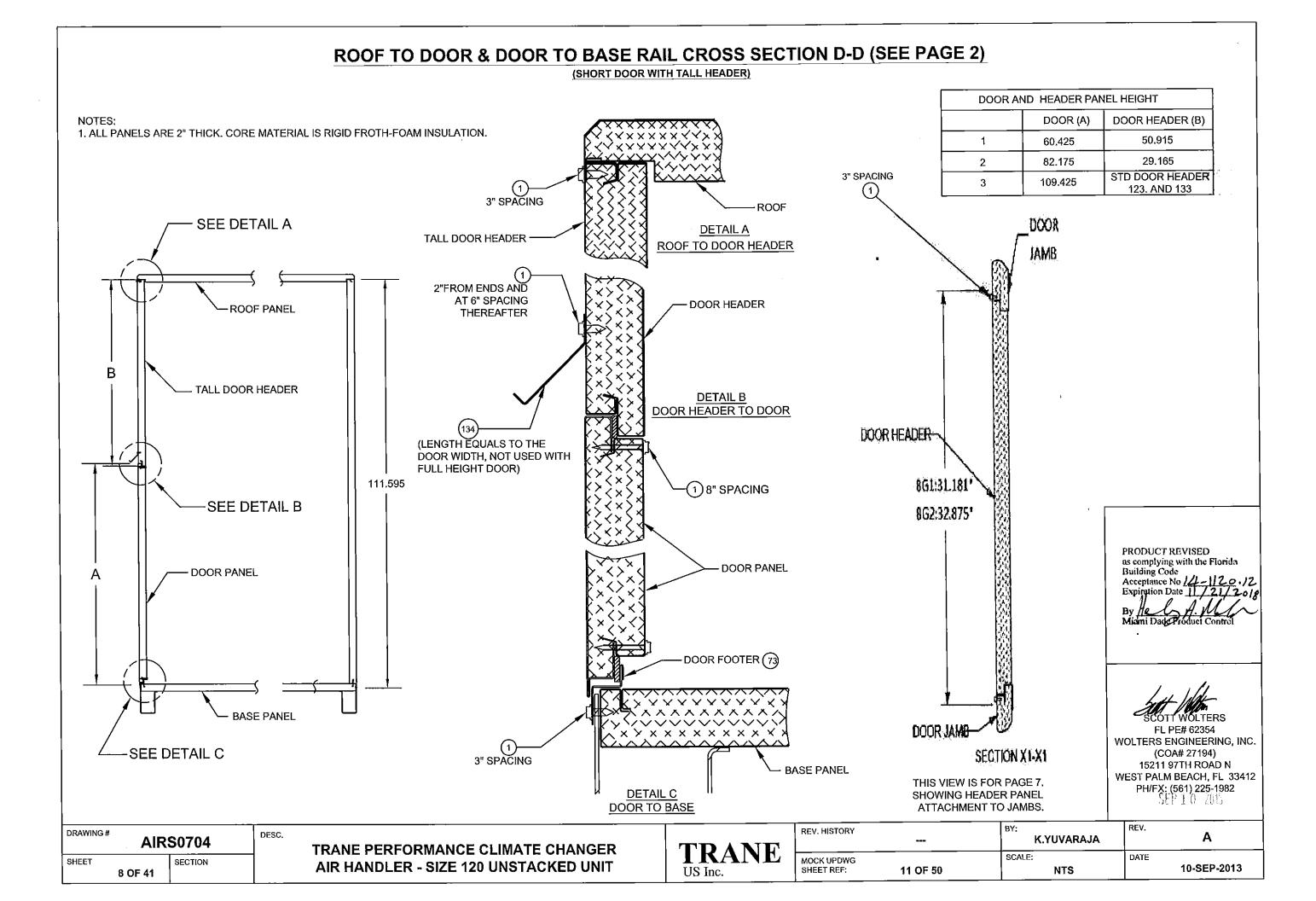
(REFER TO PAGES 12-21 FOR SUPPORT DETAILS)



DRAWING #	S0704	DESC.	ANCE CLIMATE CHANGER		REV. HISTORY		K.YUVARAJA	REV.	A
SHEET 5 OF 41	SECTION		IZE 120 UNSTACKED UNIT	US Inc.	MOCK UPDWG SHEET REF:	16, 19, 25 OF 50 29 OF 63	SCALE:	DATE	10-SEP-2013

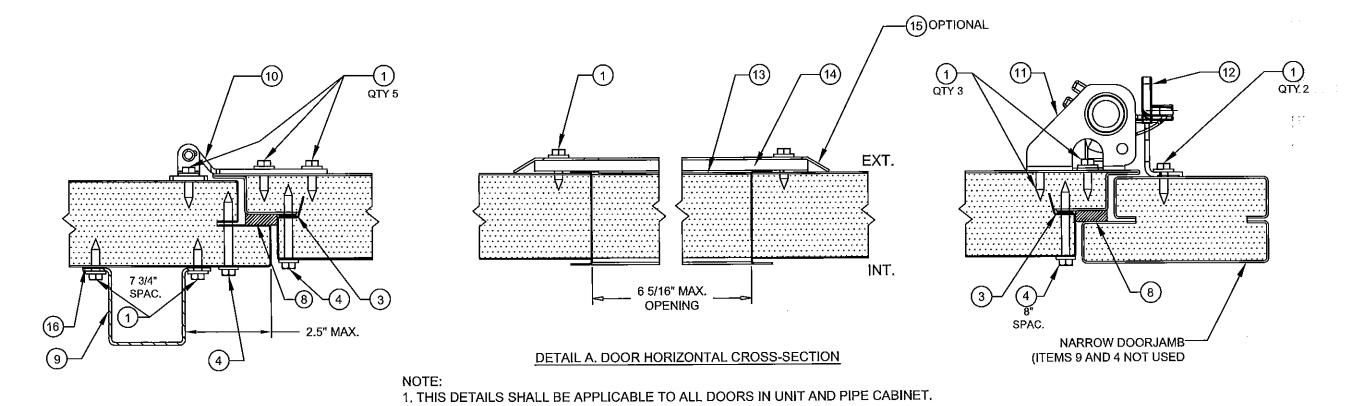






DOOR CROSS SECTION E-E

SEE PANEL NOTES SHEET 5

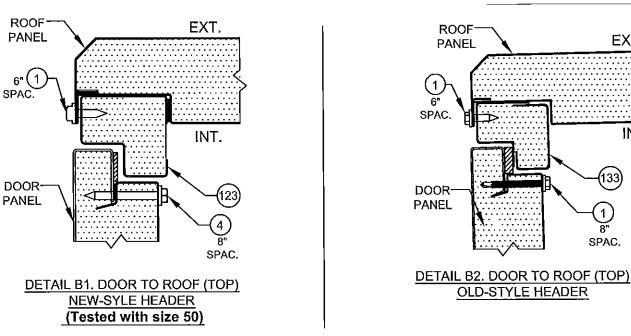


DOOR CROSS SECTION F-F STANDARD HEADER

EXT.

INT.

SPAC.



1. ONLY SHOWING TOP AND BOTTOM OF THE CROSS SECTION.

DOOR PANEL (1)8" SPAC. (73)DOOR FOOTER BASE PANEL INT. SPAC. EXT.

DETAIL C. DOOR TO BASE (BOTTOM)

PRODUCT REVISED as complying with the Florida Building Code Acceptance No 14

FL PE# 62354 WOLTERS ENGINEERING, INC. (COA# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 PH/FX: (561) 225-1982 SFP I 6 70to

DRAWING#	AIR	S0704
SHEET	9 OF 41	SECTION

NOTE:

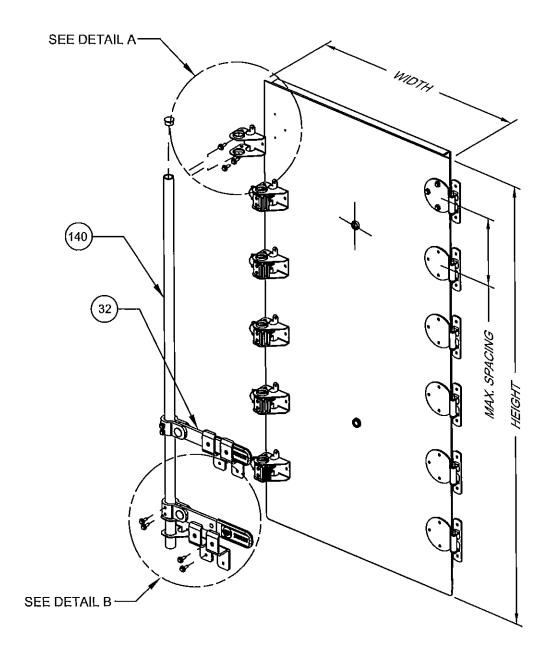
DESC.

TRANE PERFORMANCE CLIMATE CHANGER **AIR HANDLER - SIZE 120 UNSTACKED UNIT**

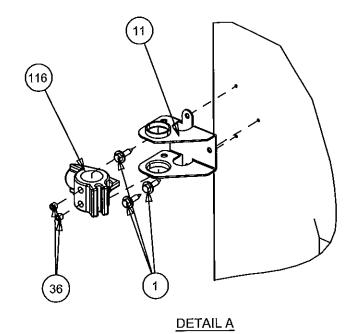
TRANE

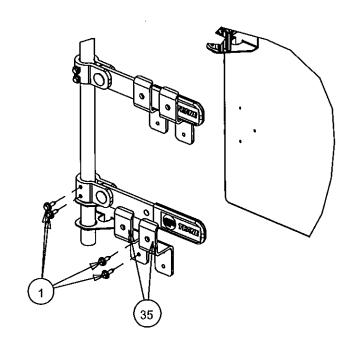
REV. HISTORY	===	BY: K.YUVARAJA	REV.
MOCK UPDWG SHEET REF:	10, 11, 12 OF 50	SCALE:	DATE 10-SEP-2013

DOOR HARDWARE LAYOUT



SECTION DESCRIPTION	MAXIMUM DOOR SIZE WIDTH x HEIGHT	HINGE MAX. SPACING	HINGE QTY	PADLOCK BRACKETS PER HANDLE	HANDLE QTY
STANDARD UNIT	32.750" x 60.425"	10.160	6	2	2
STANDARD UNIT	30.875" x 82.175"	14.510	6	2	2
STANDARD UNIT	23.353" x 109.4256"	16.634	7	2	2
PIPE CABINET	30.913" x 60.425"	10.250	6	2	2





DETAIL B

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 14 - 1170.1
Expiration Date 11 / 21/70

By He A. M. Miami Dade Product Control

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING, INC.
(COA# 27194)
15211 971H ROAD N
WEST PALM BEACH, FL 33412
PH/FX: (561) 225-1982

RAWING#	DESC.		
HEET		SECTION	

10 OF 41

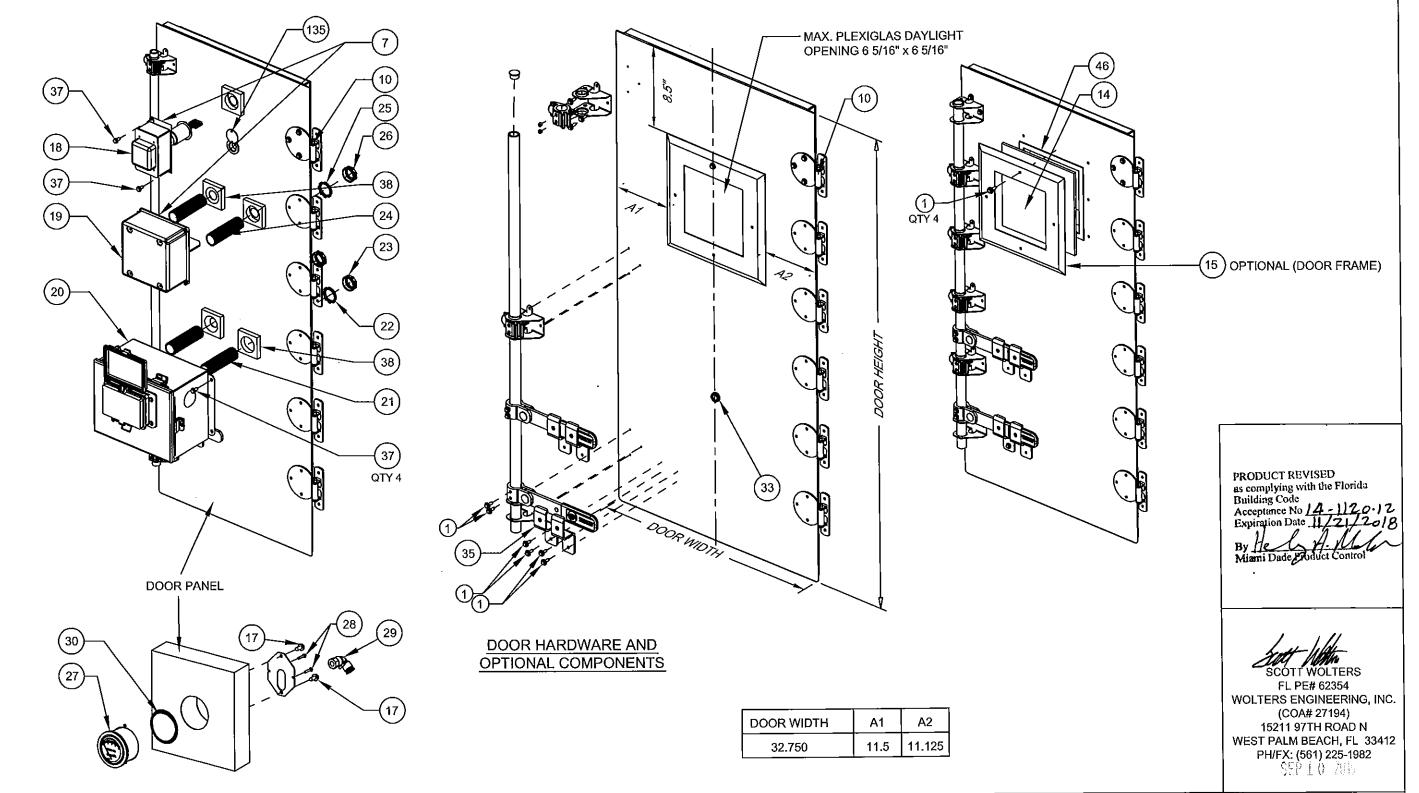
TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLER - SIZE 120 UNSTACKED UNIT

REV, HISTORY		BY: K.YUVARAJA	REV.
MOCK UPDWG SHEET REF:	13 OF 50 AND 9 OF 19	SCALE: NTS	10-SEP-2013

COMPONENTS ON DOOR (TESTED WITH SIZE 50)

NOTES:

- 1. THIS PAGE IS SHOWING ALL THE COMPENTS ATTACHED AND TESTED WITH DOORS.
- 2. THESE COMPONENTS APPLICABLE TO ALL DOORS.
- 3. TESTED WITH SIZE 50.



DRAWING #

SHEET

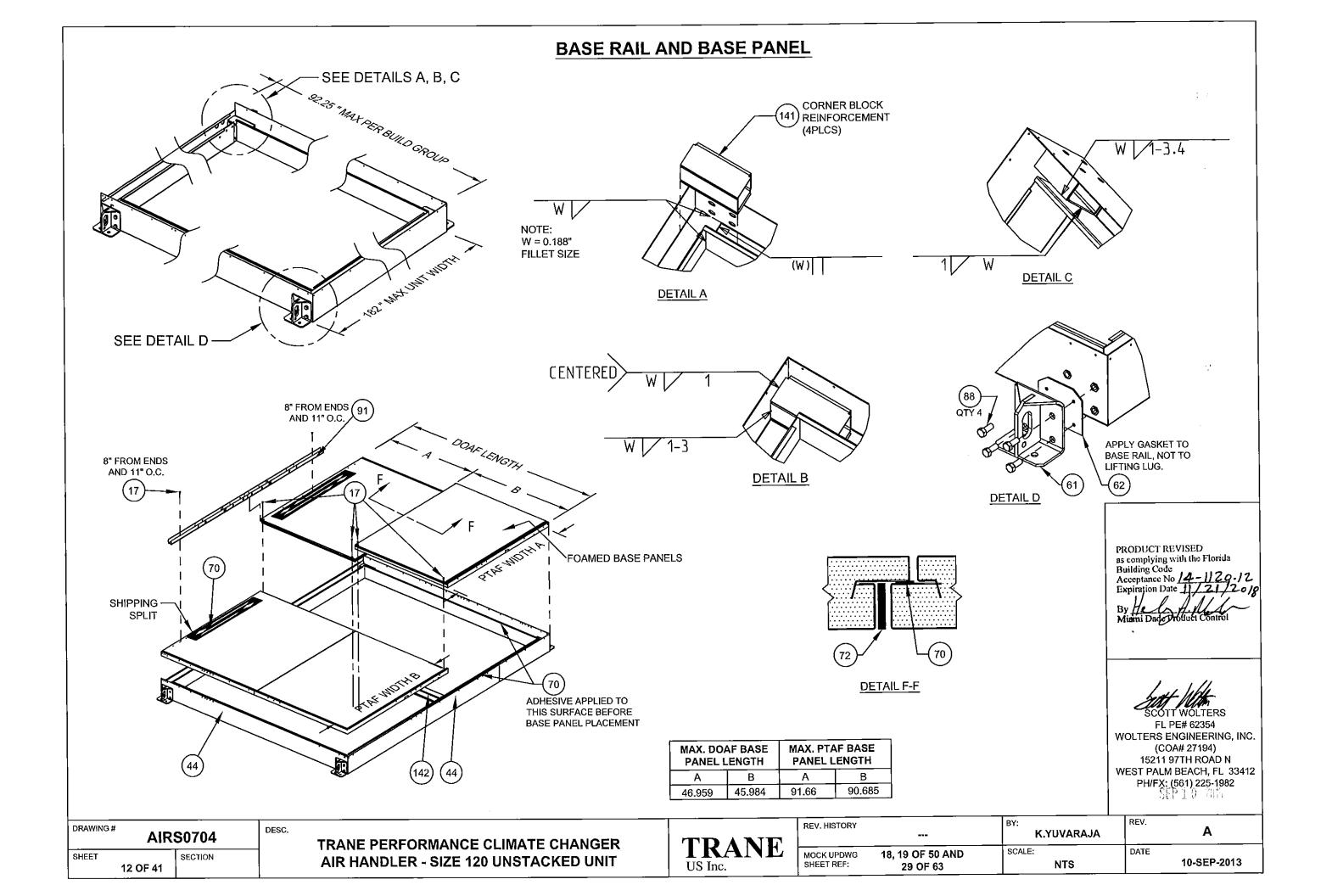
AIRS0704

DESC.

11 OF 41

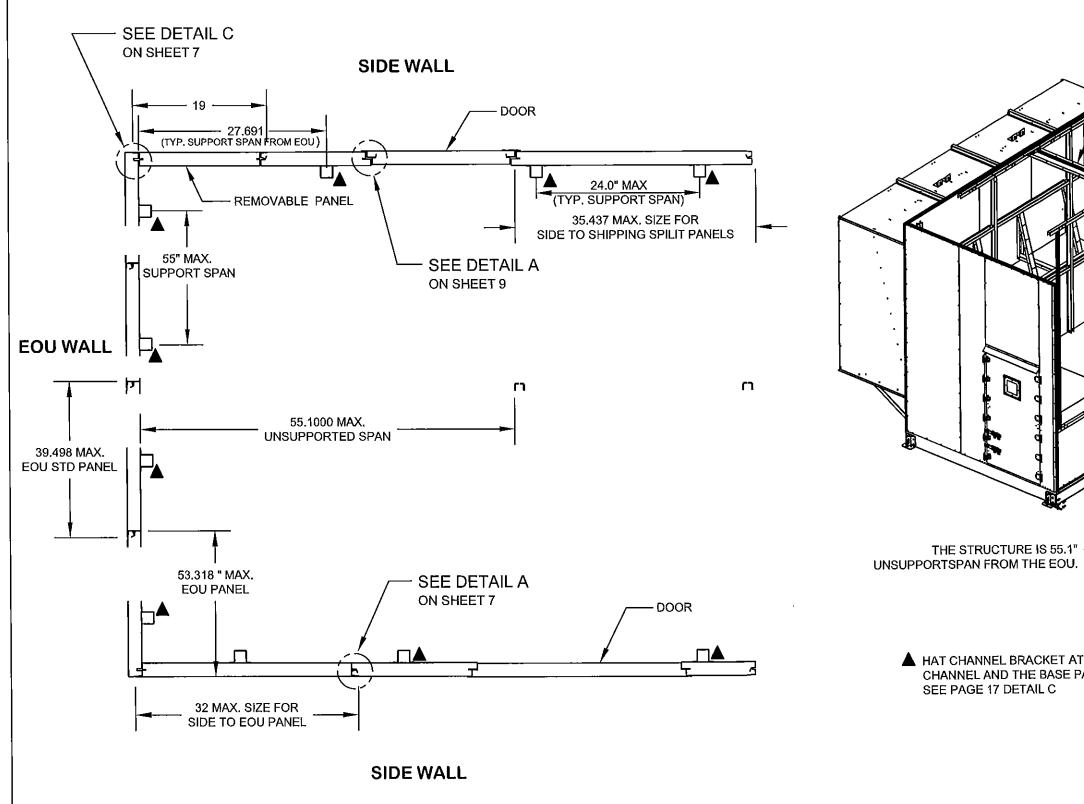
TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLER - SIZE 120 UNSTACKED UNIT

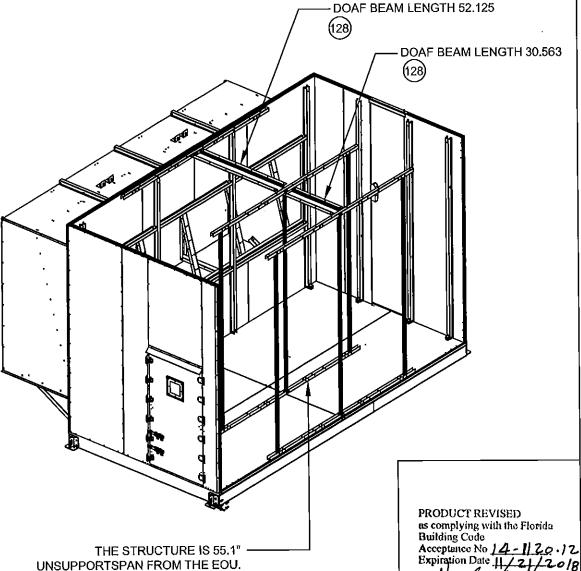
REV. HISTORY		BY: K.YUVARAJA	REV.	Α
MOCK UPDWG SHEET REF:	13, 14 OF 50 AND 17-19 OF 63	SCALE:	DATE	10-SEP-2013



TYPICAL WALL PANEL LAYOUT & SUPPORT STRUCTURE (FULL HEIGHT)

(SHOWING EOU WALL STRUCTURE WITH OPENING) SEE PAGE 17





▲ HAT CHANNEL BRACKET ATTACHED TO THE HAT CHANNEL AND THE BASE PANEL. SEE PAGE 17 DETAIL C

FL PE# 62354 WOLTERS ENGINEERING, INC. (COA# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 PH/FX: (561) 225-1982

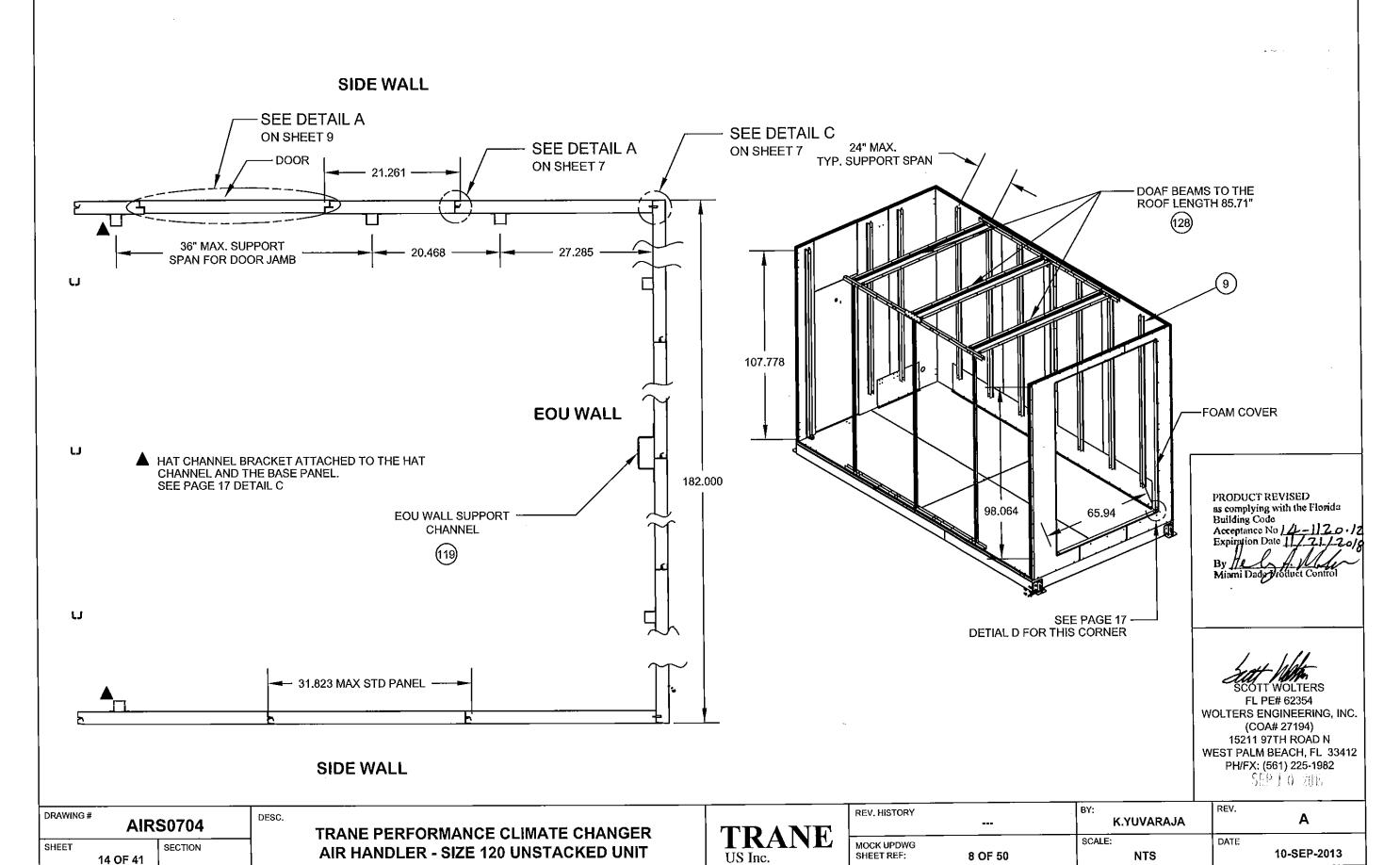
DRAWING #	AIR	S0704	DESC.	TRAN
SHEET	13 OF 41	SECTION		AIR I

NE PERFORMANCE CLIMATE CHANGER HANDLER - SIZE 120 UNSTACKED UNIT

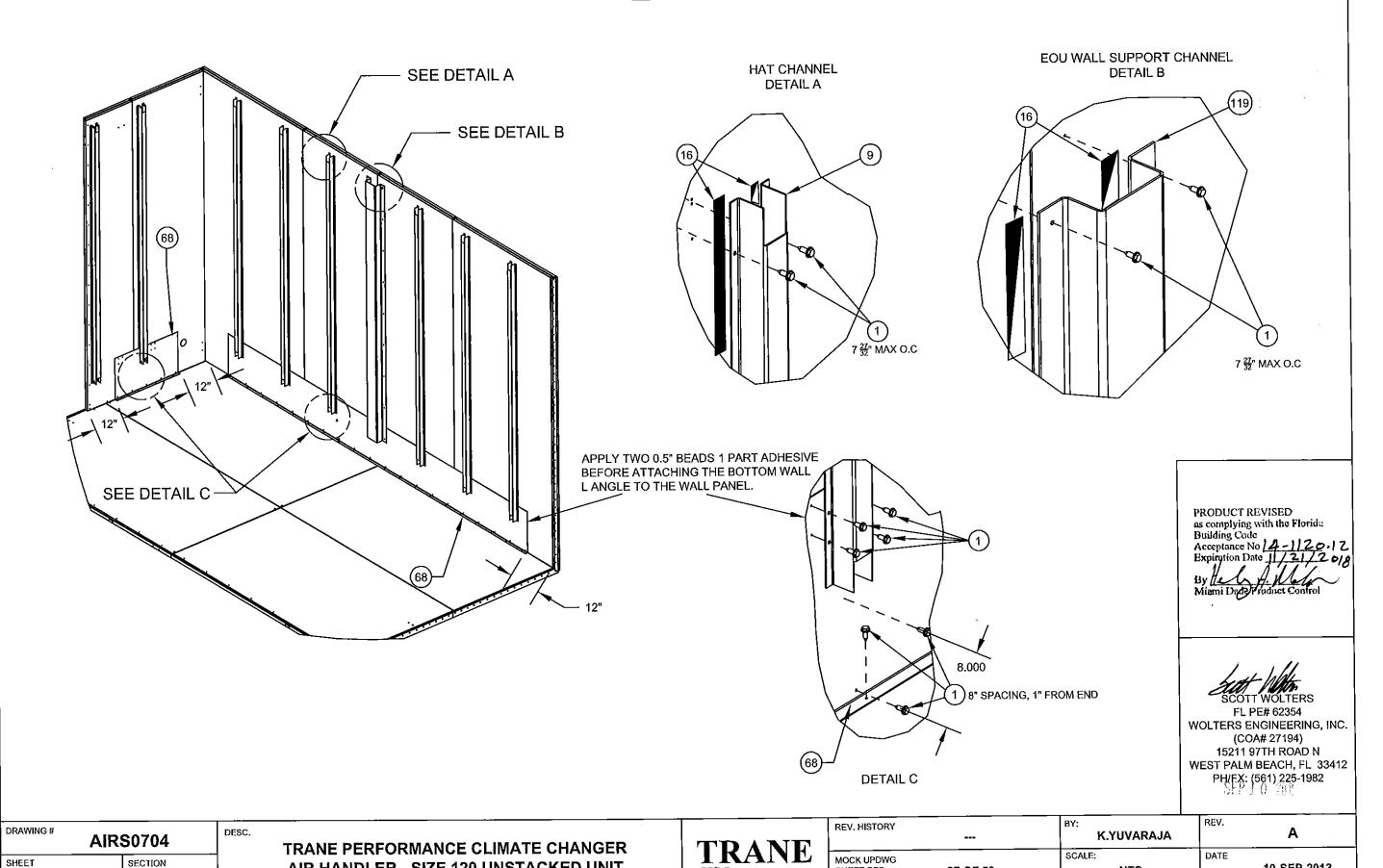
TRANE

REV. HISTORY		BY: K.YUVARAJA	REV.	A
MOCK UPDWG SHEET REF:	6 OF 50	SCALE: NTS	DATE	10-SEP-2013

TYPICAL WALL PANEL LAYOUT & WALL SUPPORT STRUCTURE (BOTH FULL HEIGHT AND SHORT)



WALL SUPPORT STRUCTURE INSTALL (SHORT HAT CHANNELS)



SHEET

15 OF 41

SECTION

AIR HANDLER - SIZE 120 UNSTACKED UNIT

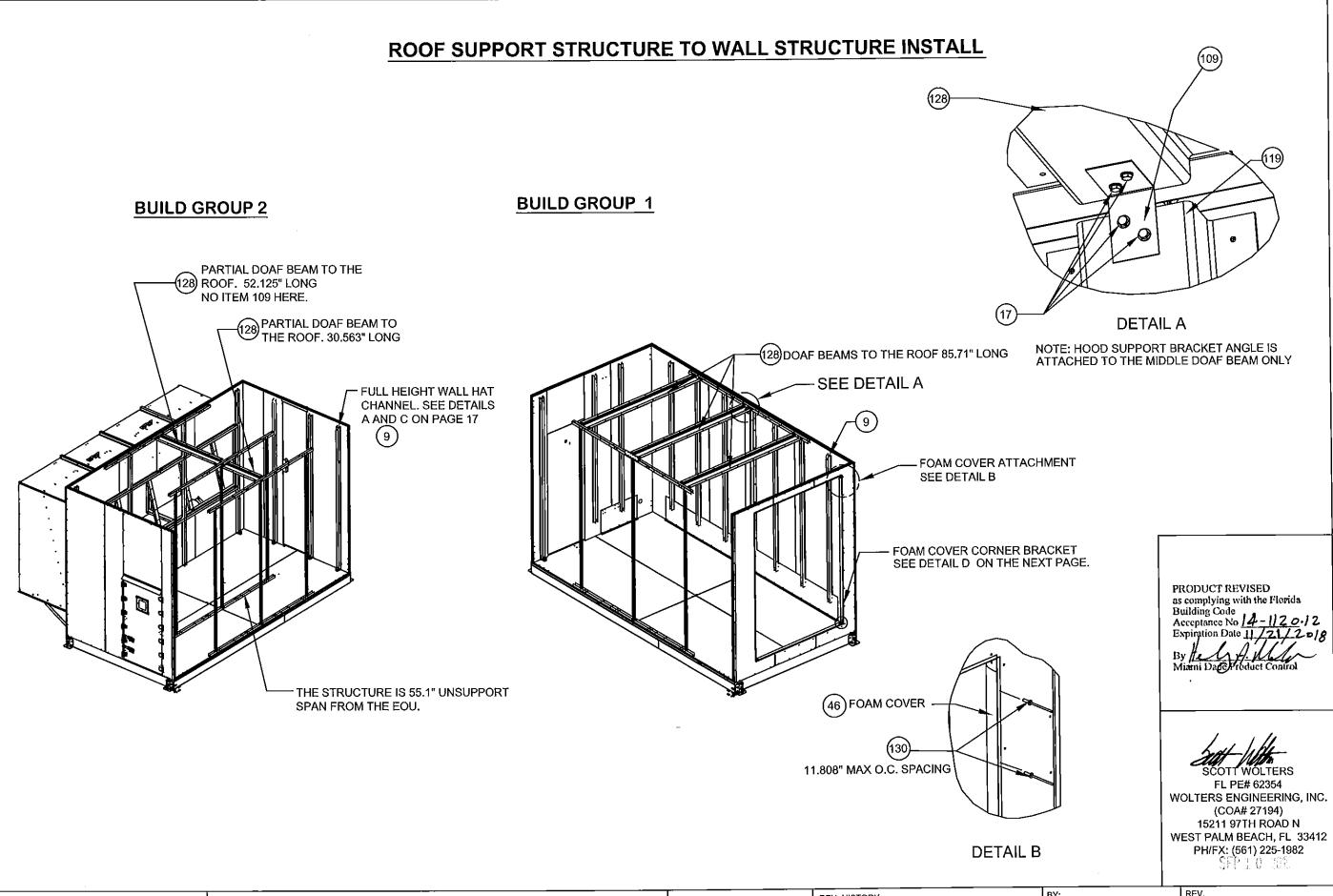
MOCK UPDWG

27 OF 50

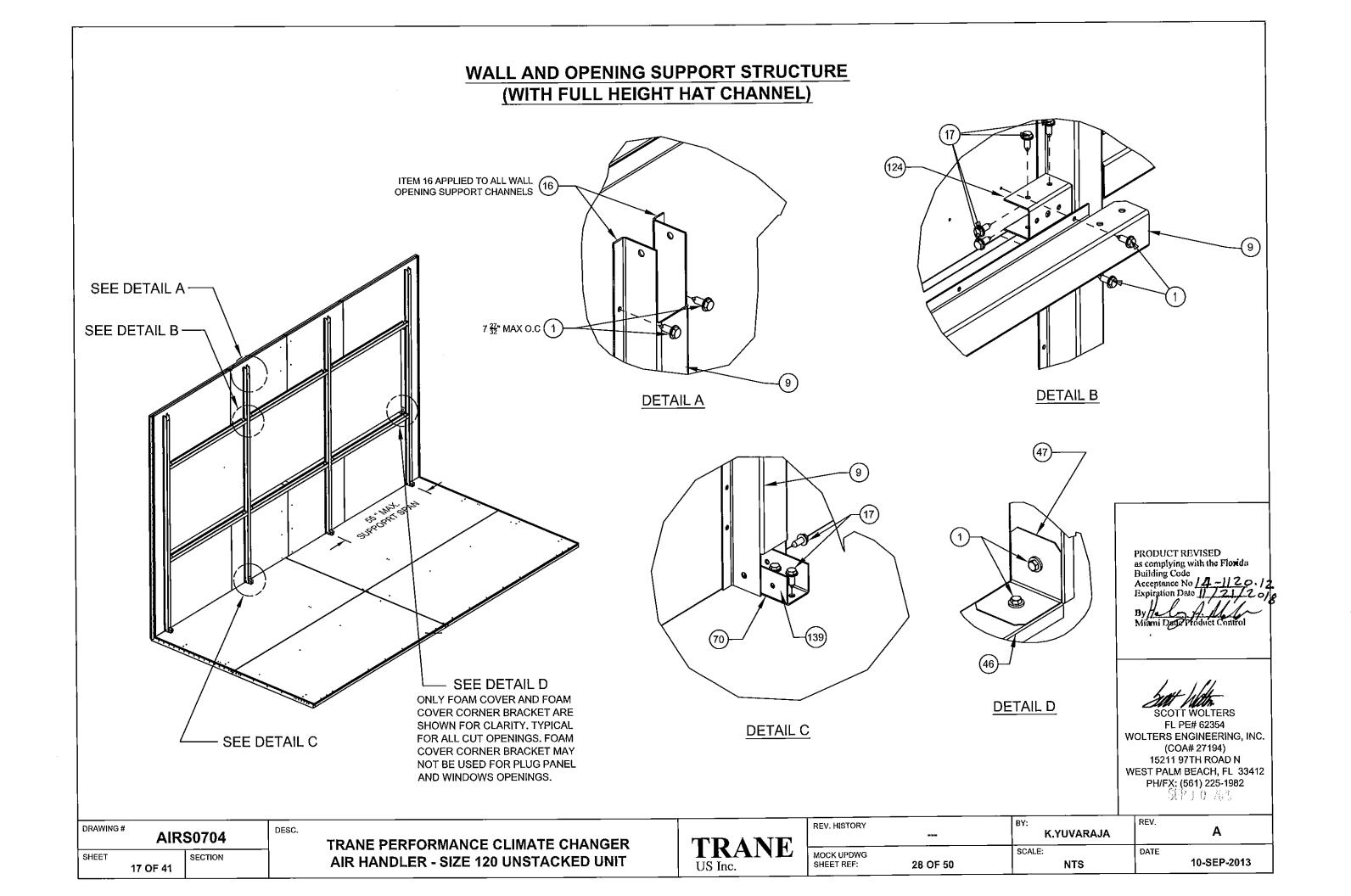
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SHEET REF:

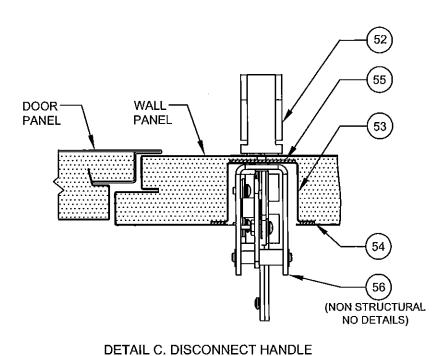
10-SEP-2013

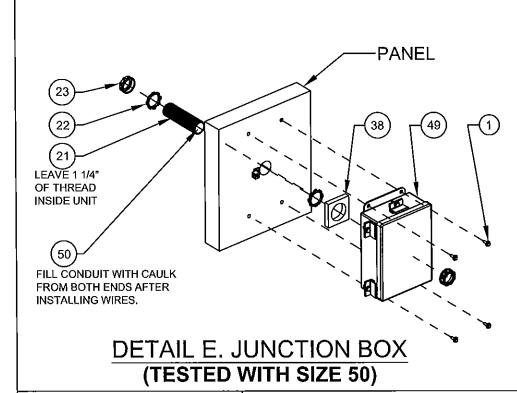


DRAWING #	S0704	DESC. TRANE PERFORMANCE CLIMATE CHANGER	TOD A NIE	REV. HISTORY	BY: K.YUVARAJA	REV.
SHEET 16 OF 41	SECTION	AIR HANDLER - SIZE 120 UNSTACKED UNIT	US Inc.	MOCK UPDWG SHEET REF: 6, 8 OF 50	SCALE: NTS	10-SEP-2013



OTHER GENERIC COMPONENT

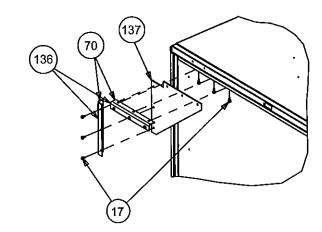




DESC.

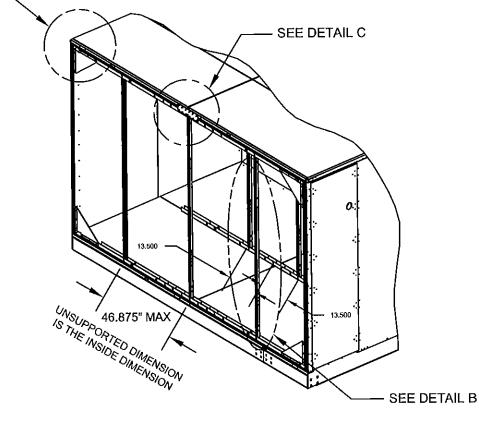
BUILD GROUP / SHIPPING SPLIT CONSTRUCTION DETAILS FOR STANDARD UNIT

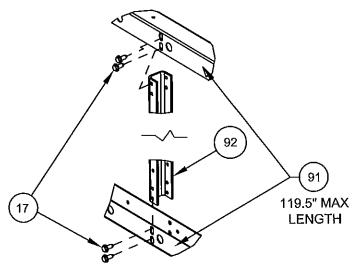
1. GUSSETS ARE APPLIED ON 1ST LEVEL ONLY.



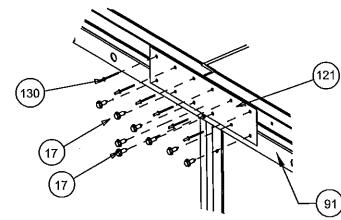
DETAIL A GUSSET INSTALL

SEE DETAIL A





DETAIL B SHIP SPLIT VERT, CHANNEL INSTALL



DETAIL C SPLICE PLATE INSTALL

PROBUCT REVISED
as complying with the Florida
Building Code

FL PE# 62354 WOLTERS ENGINEERING, INC. (COA# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 PH/FX: (561) 225-1982 SEP J. () 2015

DRAWING#

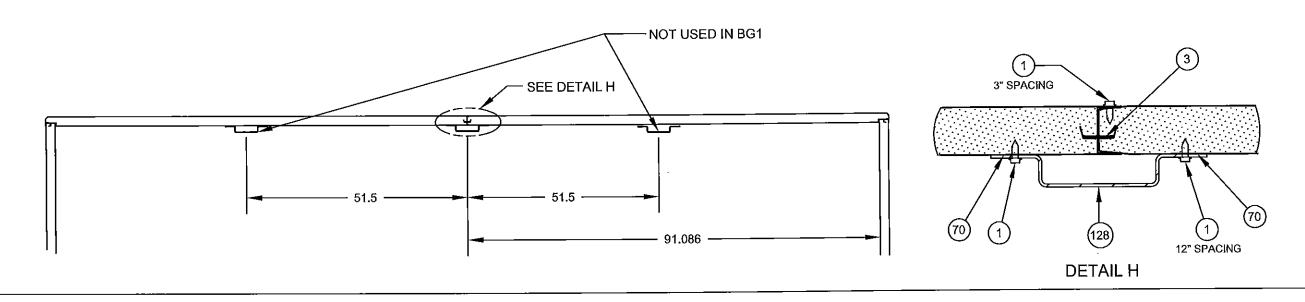
AIRS0704 SHEET SECTION 18 OF 41

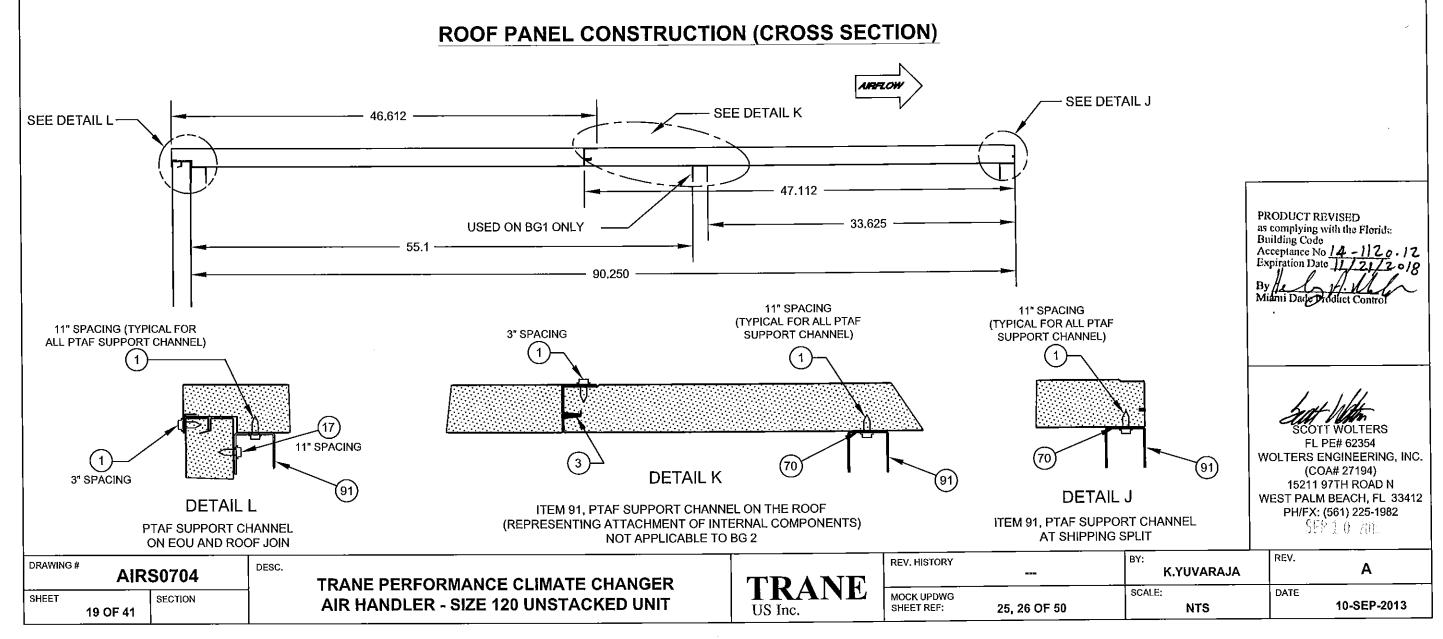
TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLER - SIZE 120 UNSTACKED UNIT

TRANE

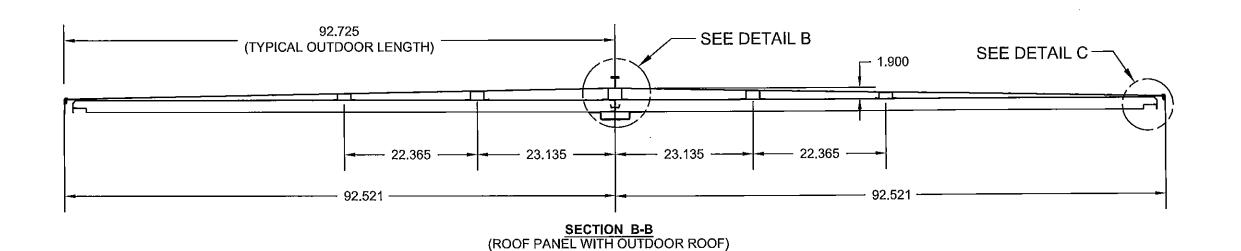
REV. HISTORY		BY: K.YUVARAJA	REV.	Α
MOCK UPDWG SHEET REF:	2, 7, 29 OF 50	SCALE:	DATE	10-SEP-2013

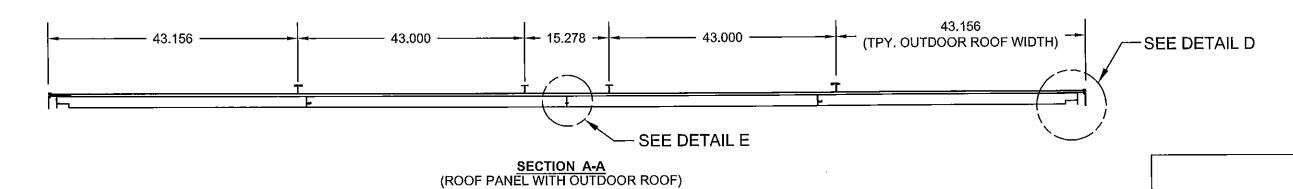
ROOF PANEL CONSTRUCTION (CROSS SECTION) AIR FLOW DIRECTION IS INTO THE PAGE

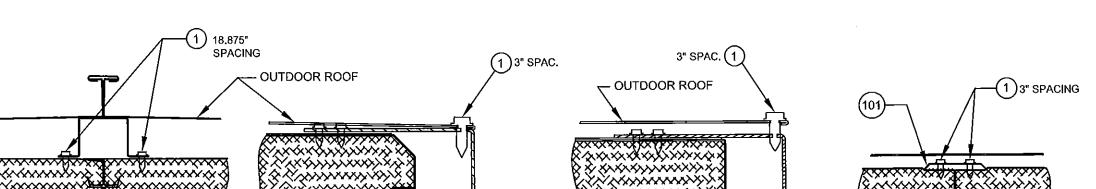




OUTDOOR ROOF TO ROOF PANEL







ROOF PANEL

DETAIL B

DETAIL C

TYPICAL SHIPPING SPLIT JOIN)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No / 4 ~ 11 20.1

Acceptance No 4-1120.12 Expiration Date 1/21/20/8

By / H. M. Miarui Dade Product Contro

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING, INC.
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FX: (561) 225-1982

SEP LO 2015

DRAWING#

SHEET

AIRS0704

20 OF 41

DESC.

TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLER - SIZE 120 UNSTACKED UNIT

TRANE

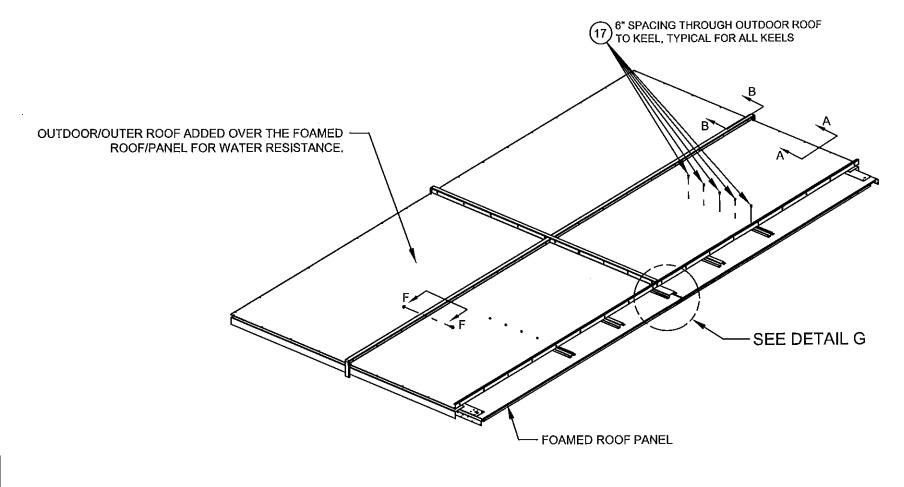
REV, HISTORY
--- BY:
K.YUVARAJA

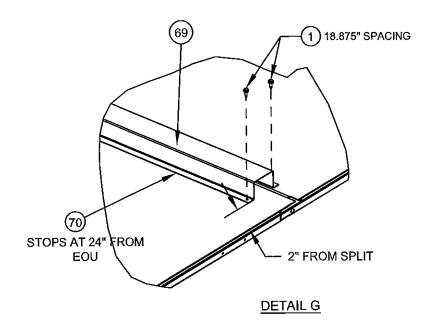
MOCK UPDWG
SHEET REF: 24 OF 50 NTS

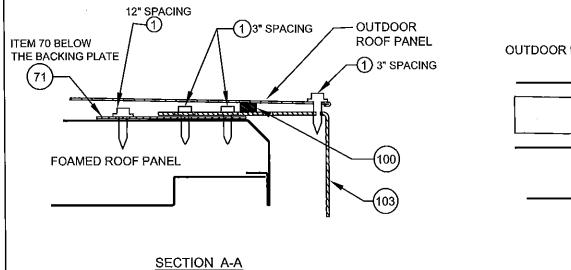
REV. A

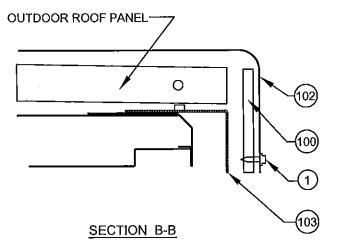
10-SEP-2013

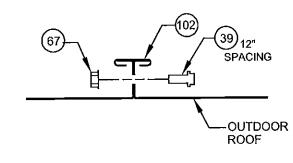
OUTDOOR ROOF DETAILS











SECTION F-F

SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING, INC.
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412

WEST PALM BEACH, FL 33 PH/FX: (561) 225-1982

RAWING #	AIRS0704	DESC.
HEET	SECTION	

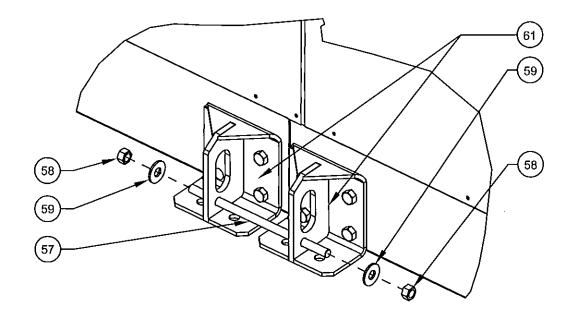
21 OF 41

TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLER - SIZE 120 UNSTACKED UNIT

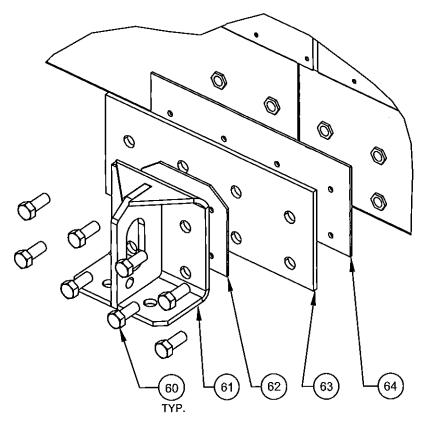
REV, HISTORY		8Y: K.YUVARAJA	REV.
MOCK UPDWG SHEET REF;	20, 22-23 OF 50	SCALE:	10-SEP-2013

BUILD GROUP/ SHIPPING SPLIT JOIN DETAILS AT THE BASE RAIL.

USE THREADED ROD TO PULL AND HOLD THE BUILD GROUPS TOGETHER.



IF A SPLICE PLATE IS PREFERRED, REMOVE LIFTING LUGS AND INSTALL SPLICE PLATE TO HOLD THE BUILD GROUP BASES TOGETHER. IF A LUG IS REQUIRED AT THAT LOCATION, IT SHALL BE CENTERED ON THE SPLICE PLATE.



PRODUCT REVISED

FL PE# 62354 WOLTERS ENGINEERING, INC. (COA# 27194)

15211 97TH ROAD N WEST PALM BEACH, FL 33412 PH/FX: (561) 225-1982

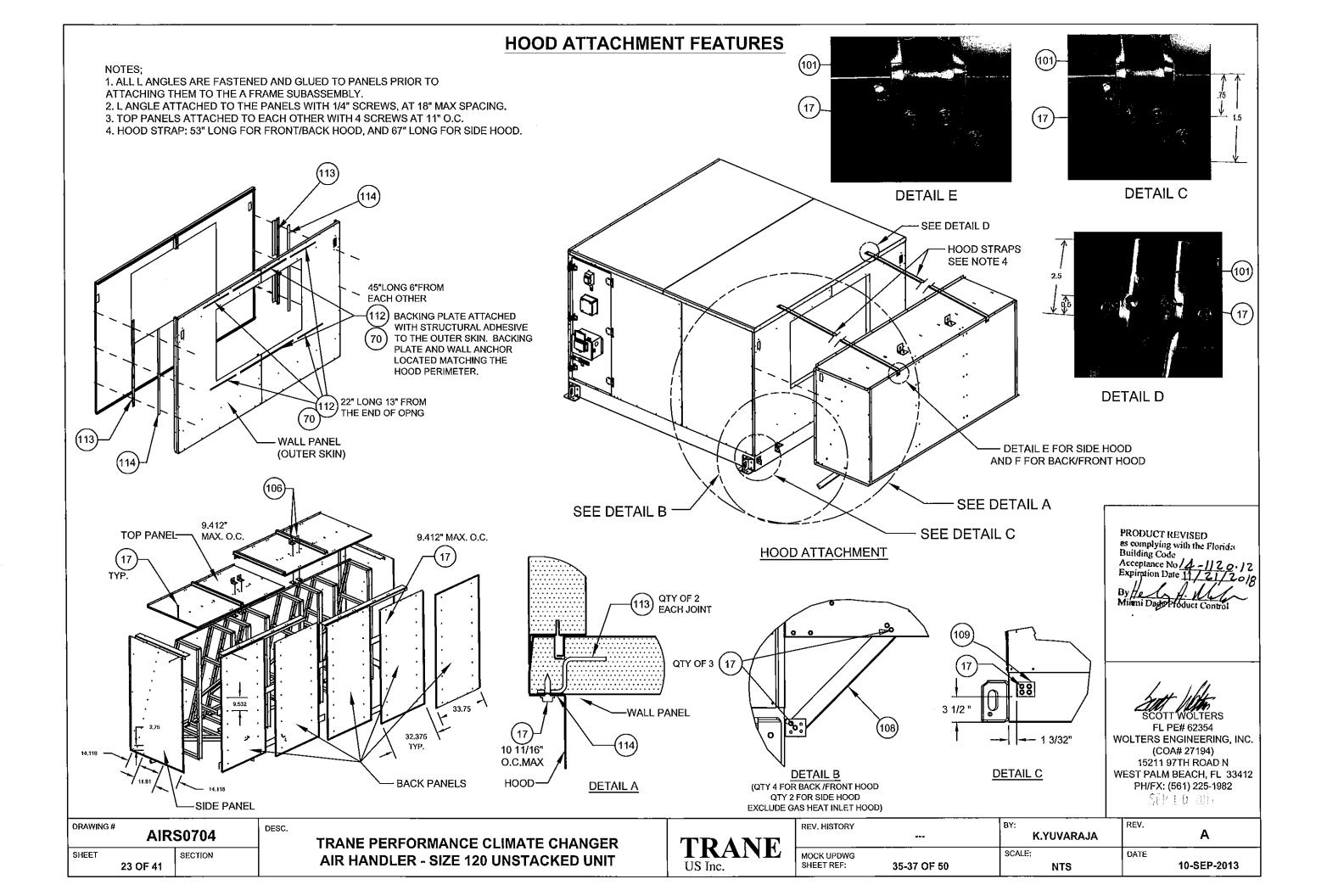
SEP i Ó arta

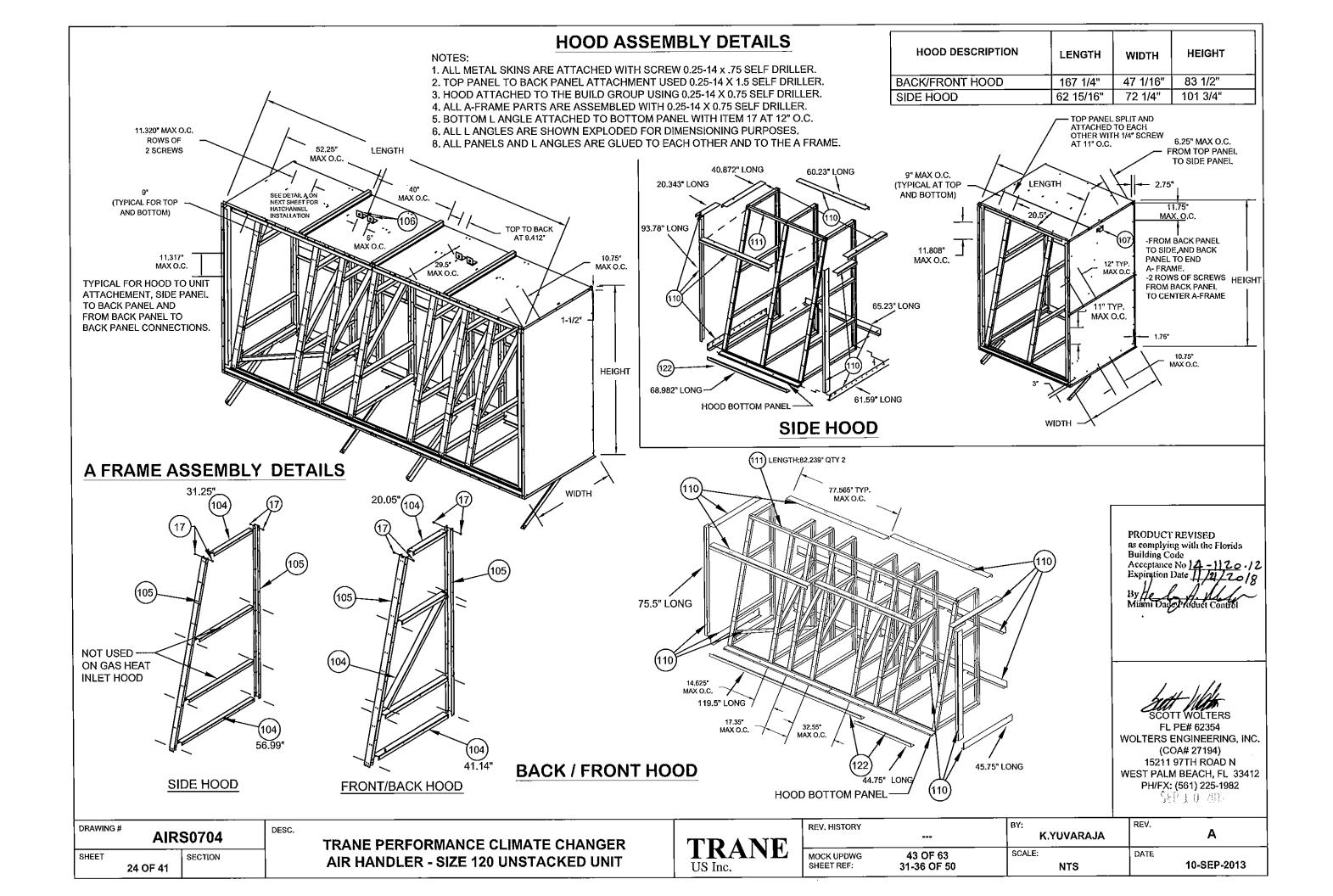
NOTES:

- 1. SECTIONS / BUILDGROUPS PULLED TOGETHER WITH THREADED ROD.
- 2. IF NEEDED, THIS CAN BE WITH ITEM 63 OR LEAVE IT AS IS WITH THREADED ROD.

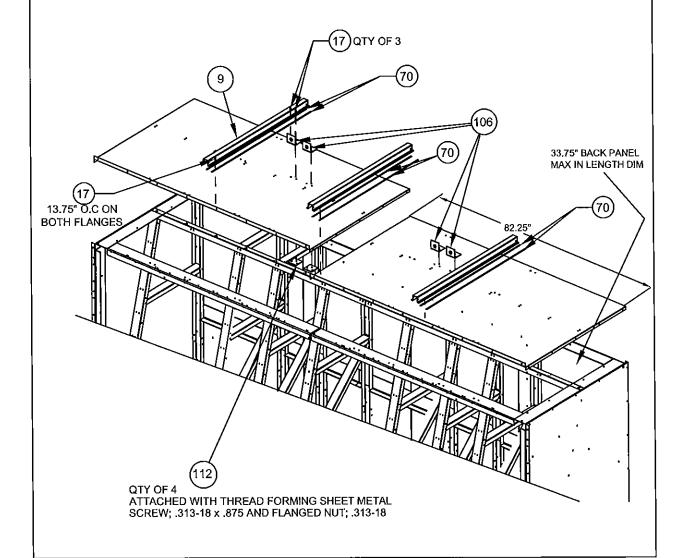
DRAWING# DESC. **AIRS0704** TRANE PERFORMANCE CLIMATE CHANGER SECTION SHEET AIR HANDLER - SIZE 120 UNSTACKED UNIT 22 OF 41

REV. HISTORY	===	BY: K.YUVARAJA	REV.	Α
MOCK UPDWG SHEET REF:	39 OF 50	SCALE:	DATE	10-SEP-2013





DETAIL A LIFTING LUG AND SUPPORT CHANNEL (HAT CHANNEL) INSTALLATION

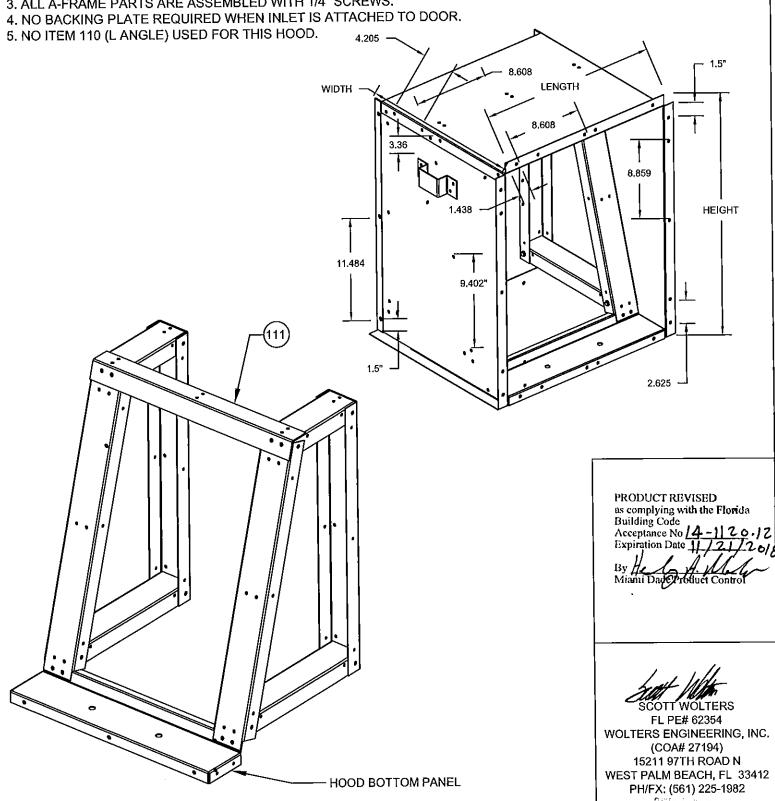


HOOD DESCRIPTION	LENGTH	WIDTH	HEIGHT
GAS HEAT INLET HOOD	22.780"	19.646"	27.250"

GAS HEAT INTAKE HOOD ASSEMBLY DETAILS (TESTED WITH SIZE 50)

NOTES:

- 1. SKINS ARE ADHERED WITH STRUCTURAL GLUE.
- 2, ALL METAL SKINS ARE ATTACHED WITH 1/4" SCREWS.
- 3. ALL A-FRAME PARTS ARE ASSEMBLED WITH 1/4" SCREWS.



A FRAME ASSEMBLY

DRAWING#	AIR	S0704	DES
SHEET		SECTION	

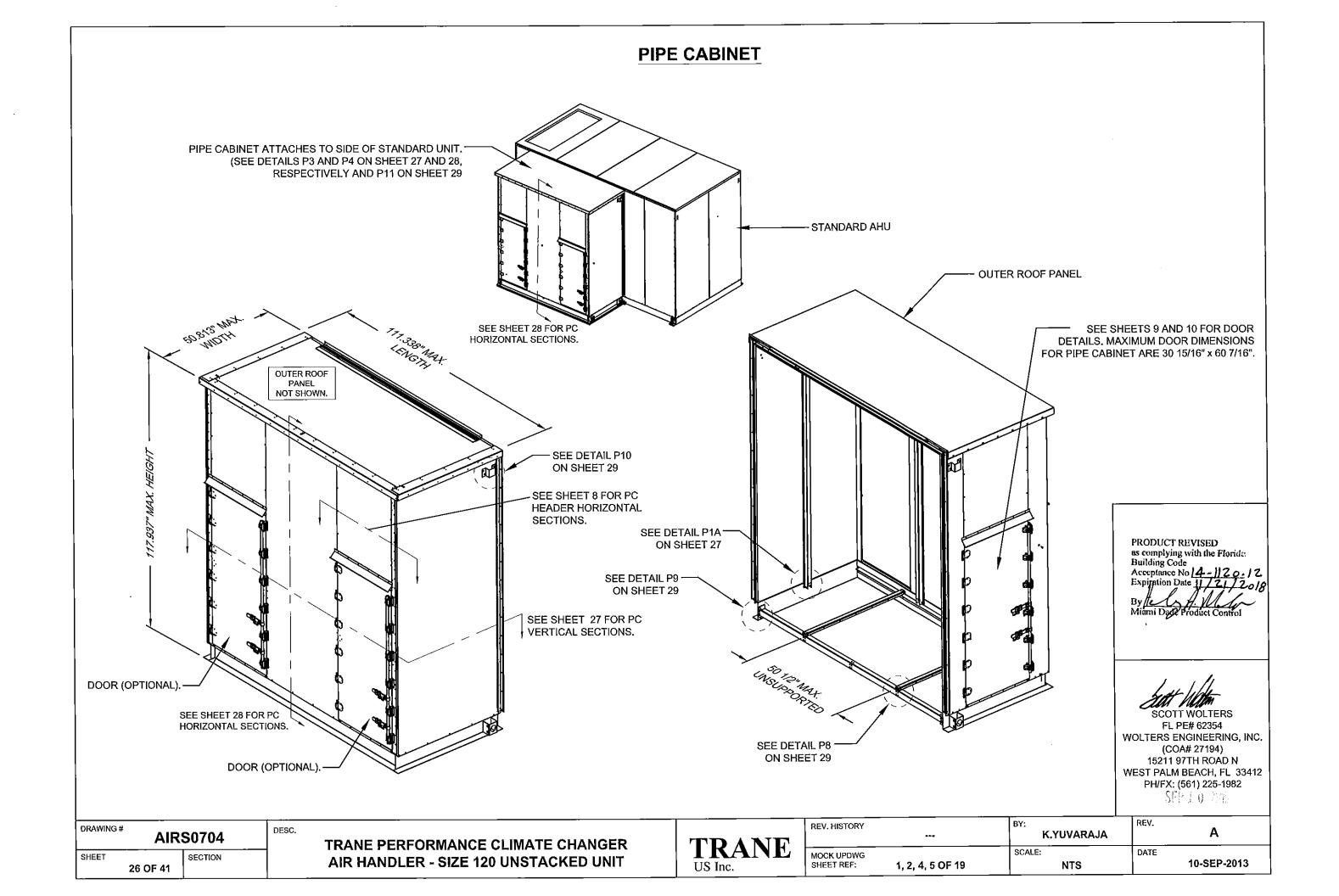
25 OF 41

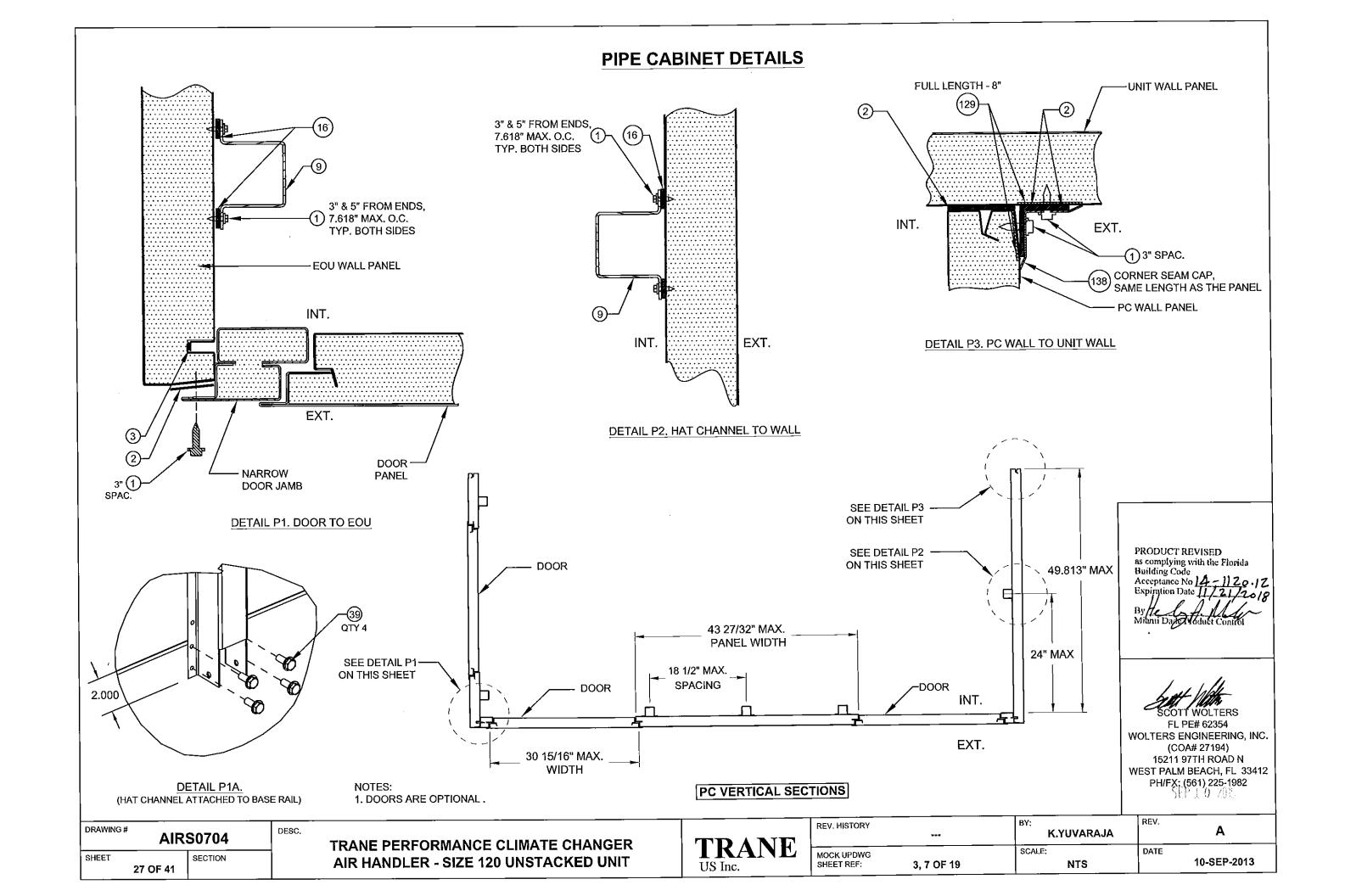
TRANE PERFORMANCE CLIMATE CHANGER **AIR HANDLER - SIZE 120 UNSTACKED UNIT**

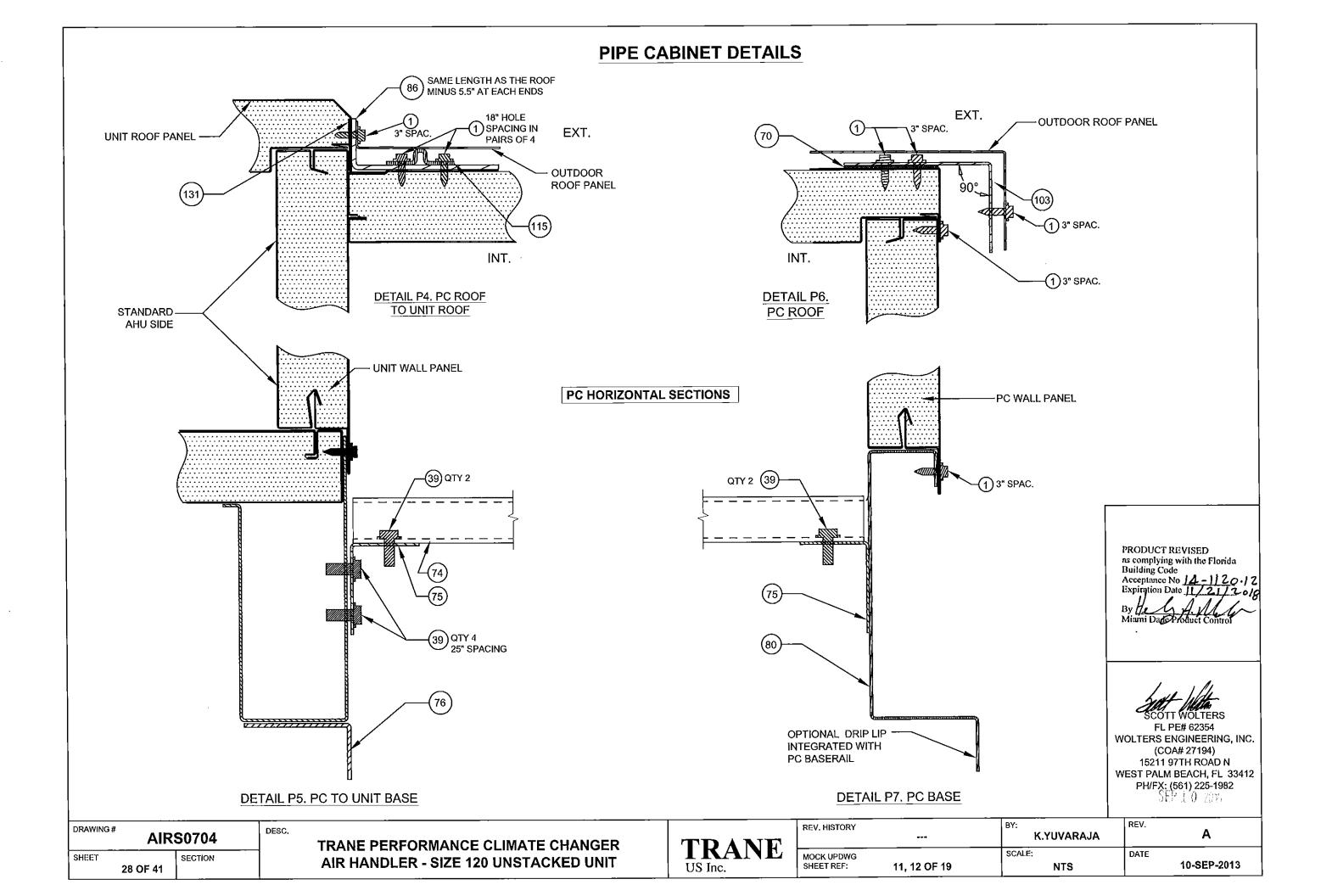
TRANE	
US Inc.	

REV. HISTORY		BY: K.YUVARAJA	REV.	Α
MOCK UPDWG SHEET REF:	35,36 OF 50 AND 47 OF 63 STACK 50 DWG	SCALE: NTS	DATE	10-SEP-2013

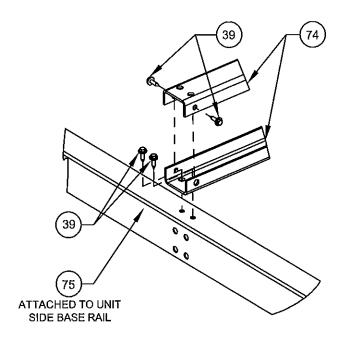
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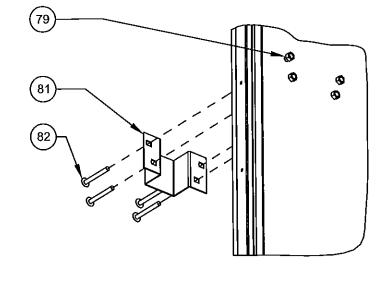




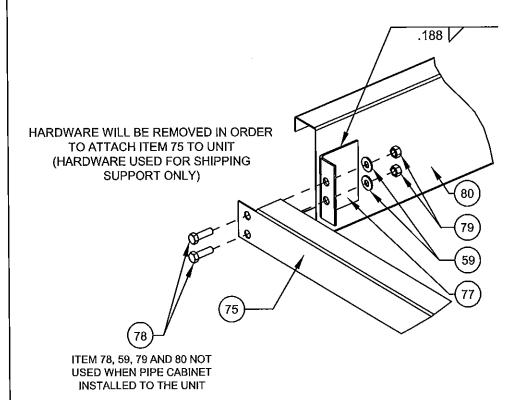
PIPE CABINET DETAILS



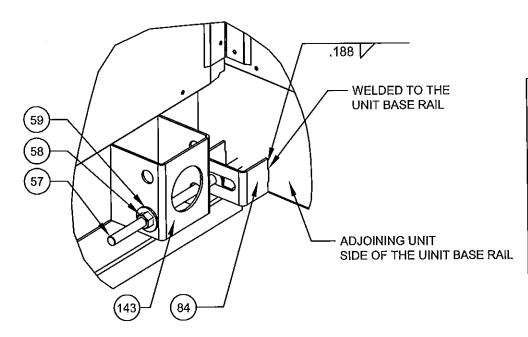
DETAIL P8. MULLION ASSEMBLY ATTACHMENT



DETAIL P10. CHAIN GUIDE/GUARD ATTACHMENT



DETAIL P9. SHIPPING CORNER



DETAIL P11. LUG CONNECTION

FL PE# 62354 WOLTERS ENGINEERING, INC. (COA# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 PH/FX: (561) 225-1982

PRODUCT REVISED as complying with the Florida Building Code

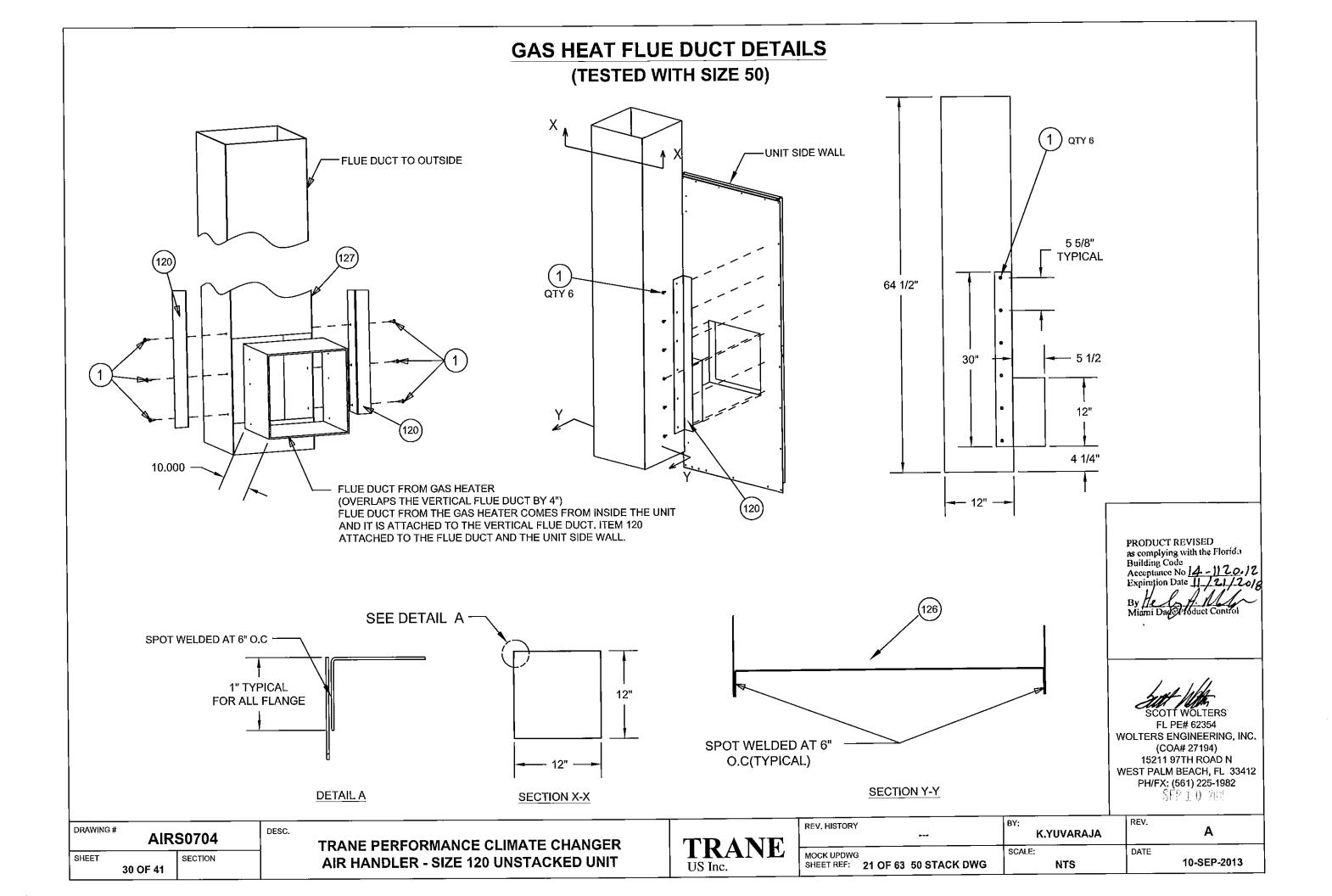
Acceptance No 14 - 11 20.12 Expiration Date 11/21/20/8

DRAWING # AIRS0704		S0704	TRANE PERFORMANCE CLIMATE CHANGER
SHEET	20 OF 41	SECTION	AIR HANDLER - SIZE 120 UNSTACKED UNIT

29 OF 41

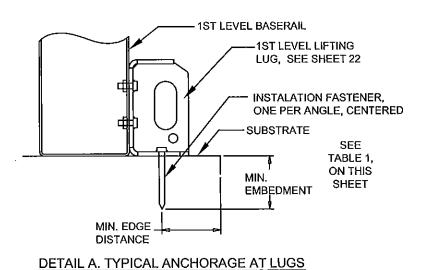
TDANE	L
TRANE	Γ
US Inc.	l

REV. HISTORY		BY: K.YUVARAJA	REV.	A
MOCK UPDWG SHEET REF:	3, 6 OF 19	SCALE:	DATE	10-SEP-2013

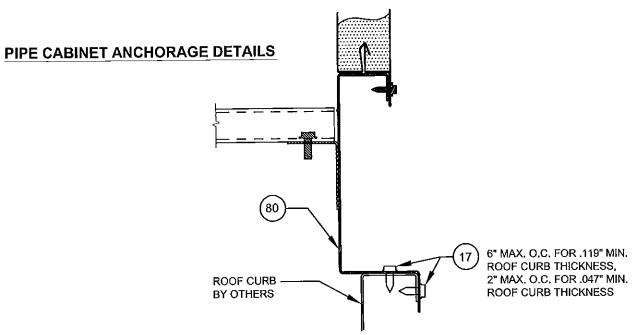


NOTE:

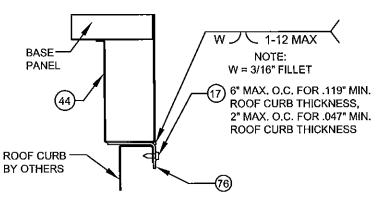
1. UNIT MAY BE INSTALLED ONTO CONCRETE (3.2 KSI MIN. COMPRESSIVE STRENGTH) OR 1/4" THICK STEEL (36 KSI MIN YIELD) SUBSTRATES WITH ANCHORS THROUGH LIFTING LUGS AND ANGLE CLIPS ATTACHED TO FIRST LEVEL BASE RAIL AS SHOWN IN THIS SHEET. UNIT MAY ALSO BE INSTALLED ONTO A 36KSI YIELD STEEL CURB BY OTHERS, WITH ITEM 17 SMS AS SHOWN IN DETAIL B. FOR PIPE CABINET ANCHORAGE SEE DETAILS P12 AND P13.



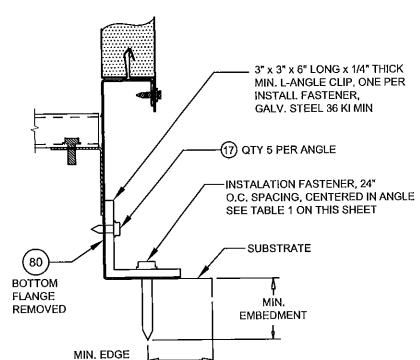
ANCHORAGE DETAILS



DETAIL P12. ANCHORAGE TO ROOF CURB



DETAIL B. TYPICAL INSTALLATION BASE RAIL TO CURB



١	PRODUCT REVISED
ı	as complying with the Florida
ı	Building Code
١	Acceptance No 14 - 1120 - 12 Expiration Date 11 / 21 / 2010
	Expiration Date 11/21/20/8
1	By He In H. W. In

Miami Dade Product Control

1ST LEVEL BASERAIL 3" x 3" x 6" LONG x 1/4" THICK MIN. L-ANGLE CLIP, ONE PER INSTALL FASTENER, 24" O.C.(MAX.) GALV, STEEL 36 KI MIN (17) QTY 5 PER ANGLE INSTALATION FASTENER, ONE PER ANGLE, CENTERED SUBSTRATE SEE TABLE 1, ON THIS SHEET **EMBEDMENT** MIN. EDGE DISTANCE -

DETAIL C: TYPICAL ANCHORAGE AT ANGLE CLIPS

DESC.

TABLE 1. INSTALLATION ANCHOR INFORMATION

ANCHOR / SUBSTRATE	MIN, EMBED.	MIN. EDGE DIST.
1/2" POWERS CHEM- STUD THREADED ROD INSTALLED WITH CHEM-STUD ADHESIVE CAPSULE IN 3.2 KSI MIN CONCRETE SUBSTRATE	1 1/2"	6"
1/2" HH. F-TYPE THREAD CUTTING SCREW INSTALLED IN 36 KSI MIN STEEL 1/4" THICK MIN. (FULL THREAD ENGAGEMENT)	1/4"	1 1/4"

DETAIL P13. DIRECT ANCHORAGE TO SUBSTRATE

DISTANCE

FL PE# 62354 WOLTERS ENGINEERING, INC. (COA# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 PH/FX: (561) 225-1982

SEP in the

DRAWING# **AIRS0704**

31 OF 41

TRANE PERFORMANCE CLIMATE CHANGER AIR HANDLER - SIZE 120 UNSTACKED UNIT

TRANE

REV. HISTORY	344	BY: K.YUVARAJA	REV.	Α
MOCK UPDWG SHEET REF:		SCALE:	DATE	10-SEP-2013

ROOF PANEL BASE PANEL SEE DETAILS ON PAGE 34 SEE DETAILS ON PAGE 33 PRODUCT REVISED as complying with the Florida Building Code Acceptance No 14-1120.12 Expiration Date 11/21/20/8 **DOAF DOAF** FL PE# 62354 WOLTERS ENGINEERING, INC. (COA# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 PH/FX: (561) 225-1982 **PTAF PTAF** REV. REV. HISTORY DRAWING# DESC. Α K.YUVARAJA **AIRS0704** TRANE US Inc. TRANE PERFORMANCE CLIMATE CHANGER SCALE: DATE MOCK UPDWG SHEET REF: SHEET

10-SEP-2013

40 OF 50

NTS

AIR HANDLER - SIZE 120 UNSTACKED UNIT

32 OF 41

BASE PANEL DETAIL SS INNER SS OUTER EOU OUTER EOU INNER GALV 0.028" GALV 0.028" GALV 0.028" GALV 0.028" 2.000" -- 0,715" **-** 0.690" L 0.281" 0.281" (7)(1) (3)(5) - 1.400" - 0.525" 1.250" --- |---0.715" → 0.777" **— 1.500**" 0.777" 0.420" 0.420" 2.000" 2.000" 1.250" 0.281 1,250" -0.500" 0.690" - 0.281" **SS OUTER** SS INNER **EOU INNER EOU OUTER** 1.250" **GALV 0.028" GALV 0.028" GALV 0.028" GALV 0.028"** 0.690" 1,500" 0.500" ∟ _{0.420"} PRODUCT REVISED as complying with the Florida Building Code Acceptance No 14-1120. Expiration Date 11/21/2 2 (4) 6 8 - 0.777" 0.281" 0.281" 0.690" 2.000" FL PE# 62354 WOLTERS ENGINEERING, INC. 0.420" (COA# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 0.690" -PH/FX: (561) 225-1982 SEP) () 到的 0.500" 1.250" REV. REV. HISTORY DRAWING# DESC. Α **K.YUVARAJA AIRS0704 TRANE** TRANE PERFORMANCE CLIMATE CHANGER SCALE: MOCK UPDWG SHEET REF: SHEET **AIR HANDLER - SIZE 120 UNSTACKED UNIT** 10-SEP-2013 41 OF 50 NTS 33 OF 41

ROOF PANEL DETAIL EOU INNER SS INNER SS OUTER EOU OUTER GALV 0.028" **GALV 0.028" GALV 0.028" GALV 0.028"** — 0.690" 1.250" 0.648" 1.208" 0.625" 1.028" 0.500" 1.028" (5) 7 (3) (1)- 0.777" 0.500" 0.690" 2.159" 0.500" 2.000" 0,690" - 0.690" 1.428" ---1.208" --||-- 0.377" 2.000" 1.250 **SS INNER SS OUTER EOU OUTER EOU INNER GALV 0.028**" **GALV 0.028" GALV 0.028" GALV 0.028"** 2.000" 0.500" 0.500" PRODUCT REVISED as complying with the Florida Building Code 0.500" Acceptance No 14-1120-12 Expiration Date 11/21/2018 4 (2) 8 0.500" (6<u>;</u>) 75° 1.250" - 1.180" 0.500" 0.625" 1.250" 0.620" <u>--</u> 1.180" 0.565" 0.250" 1.125" 0.913" 0.690" FL PE# 62354 0.690" WOLTERS ENGINEERING, INC. 1.250" (COA# 27194) 1.180" 15211 97TH ROAD N 0.250" -WEST PALM BEACH, FL 33412 1.410" ---- 1.010" PH/FX: (561) 225-1982 0.733" --- |------ 1.100" 1.500" SEP 1 0 70% REV. REV. HISTORY DRAWING# DESC. Α K.YUVARAJA **AIRS0704 TRANE** TRANE PERFORMANCE CLIMATE CHANGER SCALE: MOCK UPDWG SHEET REF: SHEET SECTION **AIR HANDLER - SIZE 120 UNSTACKED UNIT** 10-SEP-2013 42 OF 50 NTS 34 OF 41

